

Panaji, 18th April, 2018 (Chaitra 28, 1940)

SERIES I No. 2

OFFICIAL GAZETTE

GOVERNMENT OF GOA

PUBLISHED BY AUTHORITY

EXTRAORDINARY

No. 2

GOVERNMENT OF GOA

Department of Power

Office of the Chief Electrical Engineer

Notification

120/03/JERC-MYT/CEE/Tech

The Electricity Department, Government of Goa, filed its petition for Annual Performance Review of FY 2016-17 & FY 2017-18, Retail supply of Tariff for FY 2018-19 and True-up for FY 2013-14, according to the Regulations and as per the procedures outlined in section 61, 62 & 64 of the Electricity Act, 2003, before the Hon'ble Joint Electricity Regulatory Commission for the States of Goa and Union Territories.

In exercise of the powers conferred under various sections of the Electricity Act, 2003 and all powers enabling therein, on behalf of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories, has issued the tariff order dated 28th March, 2018 which is attached herewith for Determination of Tariff for FY 2018-19 with effective from 1st April, 2018 and shall remain valid till issuance of further orders of the Commission,

for the Electricity Department, Government of Goa.

In consequence to the above Tariff Order, the State Government is intending to provide subsidy to the following categories in order to give relief against the Tariff hike:

(1) LT Domestic Consumers who is having monthly consumption only upto 200 Units.

(2) LT Agriculture Pump Sets/Irrigation.

Orders in regard to providing above subsidy is in process and once the same is issued the subsidy granted will be credited to the respective consumers starting from the consumption from 1st April, 2018 in the subsequent billing months.

The above is hereby brought to the notice of the public.

By order and in the name of the Governor of Goa.

N. N. Reddy, Chief Electrical Engineer & ex officio Additional Secretary (Power).

Panaji, 17th April, 2018.

**JOINT ELECTRICITY REGULATORY COMMISSION**

For the State of Goa and Union Territories,
2nd Floor, HSIIDC Office Complex, Vanijya Nikunj,
Udyog Vihar, Phase-V, Gurugram-122016 (Haryana)
Phone: 0124-2875302 Fax: 0124-2342853
Website: www.jercuts.gov.in
Email: secy-jerc@nic.in

TARIFF ORDER

True-up of the FY 2013-14 and Approval of Aggregate Revenue Requirement (ARR) and
Determination of Retail Tariff for the FY 2018-19

Petition No. 249/2017

For

Electricity Department, Government of Goa (EDG)

28th March, 2018

Table of Contents

1. Chapter 1: Introduction	55
1.1. About Joint Electricity Regulatory Commission (JERC)	55
1.2. About Electricity Department, Government of Goa (EDG)	55
1.3. JERC Tariff Regulations, 2009	55
1.4. Multi-Year Distribution Tariff Regulations, 2014	56
1.5. Filing and Admission of the Present Petition	56
1.6. Interaction with the Petitioner	56
1.7. Notice for Public Hearing	57
1.8. Public Hearing	58
2. Chapter 2: Summary of Suggestions/Objections received, Response from the Petitioner and the Commission's Views	58
2.1. Regulatory Process	58
2.2. Suggestions/Objections, Response of the Petitioner and Commission's Comments	58
3. Chapter 3: True-up of FY 2013-14	64
3.1. Background	64
3.2. Energy Sales	64
3.3. Inter-State Transmission loss	65
3.4. Intra-State Transmission & Distribution (T&D) loss	66
3.5. Power Purchase Quantum & Cost	67
3.6. Renewable Purchase Obligation (RPO)	70
3.7. Energy Balance	70
3.8. Operation & Maintenance (O&M) Expenses	71
3.9. Capitalisation	74

3.10. Depreciation	75
3.11. Interest and Finance Charges	77
3.12. Return on Capital Base	78
3.13. Interest on Security Deposits	79
3.14. Interest on Working Capital	80
3.15. Provision for Bad & Doubtful Debts	81
3.16. Non-Tariff Income (NTI)	81
3.17. Revenue from Sale of Surplus Power	82
3.18. Aggregate Revenue Requirement (ARR)	82
3.19. Revenue at Existing Retail Tariff	83
3.20. Standalone Revenue Gap/Surplus	85
4. Chapter 4: True-up of the FY 2014-15, FY 2015-16 and FY 2016-17	85
4.1. Applicable provisions of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009	85
4.2. Approach for the True-up of the FY 2014-15 and FY 2015-16 and FY 2016-17	86
5. Chapter 5: Annual Performance Review of FY 2017-18	87
5.1. Background	87
5.2. Approach for the Review for the FY 2017-18	87
6. Chapter 6: Determination of Aggregate Revenue Requirement for the FY 2018-19	88
6.1. Background	88
6.2. Approach for determination of ARR for the FY 2018-19	89
6.3. Projection of Number of Consumers, Connected Load and Energy Sales	89
6.4. Energy Savings under Domestic Efficiency Lamp Programme (DELP)	90
6.5. Inter-State Transmission Loss	90
6.6. Intra-State Transmission and Distribution (T&D) Loss	91
6.7. Power Purchase Quantum & Cost	91
6.8. Renewable Purchase Obligation (RPO)	95
6.9. Energy Balance	96
6.10. Operation & Maintenance (O&M) Expenses	97
6.11. Capitalisation	97
6.12. Depreciation	97
6.13. Interest and Finance Charges	98
6.14. Return on Equity (RoE)	98
6.15. Interest on Security Deposits	99
6.16. Demand Side Management (DSM) Expenses	99
6.17. Interest on Working Capital	100
6.18. Non-Tariff Income (NTI)	101
6.19. Aggregate Revenue Requirement (ARR)	101
6.20. Revenue at Existing Retail Tariff	101
6.21. Standalone Revenue Gap/Surplus	104
7. Chapter 7: Tariff Principles and Design	105
7.1. Overall Approach	105
7.2. Applicable Regulations	105
7.3. Revenue Gap/Surplus at Existing Tariff	107
7.4. Treatment of the Revenue Gap/Surplus and Tariff Design	107
8. Chapter 8: Open Access Charges for the FY 2018-19	115
8.1. Wheeling Charges	115
8.2. Additional Surcharge	117
8.3. Cross-Subsidy Surcharge	119
9. Chapter 9: Tariff Schedule	121
9.1. Tariff Schedule	121
9.2. Applicability	123

9.3. General Terms and Conditions	131
9.4. Schedule of Miscellaneous Charges	135
10. Chapter 10. Fuel and Power Purchase Adjustment Mechanism	138
10.1. Legal Provisions	138
10.2. Existing formula	139
10.3. Need to review the existing mechanism	142
10.4. New formula	144
11. Chapter 11: Directives	148
11.1. Directives continued in this Order	148
11.2. New Directives issued in this Order	154
11.3. Directives dropped in this Order	154
Annexures	155
Annexure 1: Public Notices published by the Commission	155
Annexure 2: Public Notices published by the Petitioner	160
Annexure 3: List of Stakeholders	163

List of Tables

Table 1: Timelines w.r.t the Petition filed by EDG	54
Table 2: Timelines of the interaction with the Petitioner	57
Table 3: Details of Public Notices published by the Commission	57
Table 4: Details of Public Notices published by the Petitioner	57
Table 5: Energy Sales (MU) trued-up by the Commission	65
Table 6: Inter-State transmission loss (%)	66
Table 7: Intra-State distribution loss (%)	66
Table 8: Power Purchase cost submitted by the Petitioner (In Rs. Cr)	67
Table 9: Power Purchase Quantum (MU) and cost (Rs Cr) approved by the Commission	69
Table 10: Energy Balance (MU) submitted by Petitioner	70
Table 11: Energy Balance (MU) approved by Commission at State Periphery	71
Table 12: Employee Expenses submitted by the Petitioner (In Rs. Cr)	72
Table 13: Employee Expenses approved by Commission (In Rs. Cr)	72
Table 14: A&G Expenses submitted by Petitioner (In Rs. Cr)	73
Table 15: A&G Expenses approved by Commission (In Rs. Cr)	73
Table 16: R&M Expenses approved by Commission (In Rs. Cr)	74
Table 17: O&M Expenses approved by Commission (In Rs. Cr)	74
Table 18: Capitalisation approved by Commission (In Rs. Cr)	75
Table 19: Depreciation submitted by Petitioner (In Rs. Cr)	75
Table 20: Depreciation Rate (%)	76
Table 21: Depreciation approved by Commission (In Rs. Cr)	76
Table 22: Interest and Finance charges approved by Commission (In Rs. Cr)	78
Table 23: Interest on Consumer Security Deposits submitted by Petitioner (In Rs. Cr)	79
Table 24: Interest on Consumer Security Deposits approved by Commission (In Rs. Cr)	79
Table 25: Interest on Working Capital approved by Commission (In Rs. Cr)	80
Table 26: Non-Tariff Income as submitted by Petitioner (In Rs. Cr)	81
Table 27: Non-Tariff Income approved by Commission (In Rs. Cr)	81
Table 28: Non-Tariff Income approved by Commission (In Rs. Cr)	82
Table 29: Aggregate Revenue Requirement approved by Commission for FY 2013-14 (In Rs. Cr)	82
Table 30: Revenue at existing tariff submitted by the Petitioner for FY 2013-14 (In Rs. Cr)	83
Table 31: Revenue at existing tariff approved by Commission for FY 2013-14 (In Rs. Cr)	84
Table 32: Standalone Revenue Gap/Surplus approved by Commission for FY 2013-14 (In Rs. Cr)	85

Table 33: No. of Consumer, Connected Load and Energy Sales approved by Commission	90
Table 34: Energy Savings under DELP (MU)	90
Table 35: Inter-State Transmission Loss (%)	91
Table 36: Intra-State T&D loss (%)	91
Table 37: Power Purchase Quantum (MU) and cost (Rs. Cr) approved by Commission	93
Table 38: Summary of Renewable Purchase Obligation (RPO) (MU)	95
Table 39: Cost towards compliance of Renewable Purchase Obligation (RPO) (In Rs. Cr)	96
Table 40: Energy Balance (MU) approved by Commission	96
Table 41: O&M Expenses approved by Commission (In Rs. Cr)	97
Table 42: Capitalisation approved by the Commission (In Rs. Cr)	97
Table 43: Depreciation approved by Commission (In Rs. Cr)	98
Table 44: Interest and Finance Charges approved by Commission (In Rs. Cr)	98
Table 45: RoE approved by Commission (In Rs. Cr)	99
Table 46: Interest on Security Deposits approved by Commission (In Rs. Cr)	99
Table 47: DSM Expenses as approved by Commission (In Rs. Cr)	100
Table 48: Interest on Working Capital approved by Commission (In Rs. Cr)	100
Table 49: Non-tariff Income approved by Commission (In Rs. Cr)	101
Table 50: Aggregate Revenue Requirement approved by Commission for FY 2018-19 (In Rs. Cr)	101
Table 51: Revenue submitted by Petitioner (In Rs. Cr)	102
Table 52: Revenue from existing retail tariff for FY 2018-19 (In Rs. Cr)	103
Table 53: Standalone Revenue Gap/Surplus approved by Commission (In Rs. Cr)	105
Table 54: Standalone Revenue Gap/Surplus submitted by Petitioner (In Rs. Cr)	107
Table 55: Standalone Revenue Gap/Surplus determined by Commission (In Rs. Cr)	107
Table 56: Retail Tariff proposed by Petitioner	108
Table 57: Existing and approved tariff	111
Table 58: Revenue from approved retail tariff (In Rs. Cr)	113
Table 59: Tariff increase approved by Commission	114
Table 60: Revised Revenue Gap/ Surplus approved by Commission (In Rs. Cr)	114
Table 61: Cost of Supply and tariff increase with and without Govt. Budgetary support	115
Table 62: Wheeling Charge calculation as submitted by Petitioner	116
Table 63: Allocation matrix approved by Commission	116
Table 64: Parameters assumed for voltage wise allocation of wheeling costs	117
Table 65: Wheeling Charges approved by Commission	117
Table 66: Additional Surcharge approved by Commission	118
Table 67: Cross-Subsidy Surcharge as proposed by the Petitioner	119
Table 68: Voltage wise losses assumed by Commission	119
Table 69: Energy Input at each voltage level (MU)	120
Table 70: Parameters used for allocation of fixed costs	120
Table 71: Voltage Wise Cost of Supply (VCoS)	120
Table 72: Cross-Subsidy Surcharge approved by Commission (Rs/kWh)	121
Table 73: Tariff Schedule	121
Table 74: Applicability of Tariff Schedule	123
Table 75: Applicability of ToD Tariff	134
Table 76: Schedule of Miscellaneous Charges	135
Table 77: Key Takeaways	143
Table 78: Rapproved determined by Commission for FY 2018-19	148
Table 79: List of Stakeholders	163

List of abbreviations

Abbreviation	Full Form
A&G	Administration & General
ACoS	Average Cost of Supply
Act	The Electricity Act, 2003
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal of Electricity
BPL	Below Poverty Line
CAGR	Compound Annualized Growth Rate
Capex	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Stations
Ckt. Km	Circuit Kilometer
COD	Commercial Operation Date
Commission/JERC	Joint Electricity Regulatory Commission for the State of Goa and Union Territories
Cr	Crore
DELP	Domestic Efficient Lightening Program
Discom	Distribution Company
DSM	Deviation Settlement Mechanism
EA 2003	The Electricity Act, 2003
EDG	Electricity Department, Govt. of Goa
EDF	Electricity Development Fund
EHT	Extra High Tension
ERP	Enterprise Resource Planning
FAR	Fixed Asset Register
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
IEX	Indian Energy Exchange Limited
IPDS	Integrated Power Development Scheme
IPP	Independent Power Producer
ISTS	Inter-State Transmission System
JERC	Joint Electricity Regulatory Commission for the State of Goa and Union Territories

KVA	Kilo Volt Ampere
KWh	Kilo Watt Hour
LT	Low Tension
MOD	Merit Order Dispatch
MU	Million Units
MW	Mega Watt
MYT	Multi-Year Tariff
NFA	Net Fixed Assets
NTPC	National Thermal Power Corporation
NVVNL	NTPC Vidyut Vyapar Nigam Limited
O&M	Operation and Maintenance
PGCIL	Power Grid Corporation of India Ltd.
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
R-APDRP	Restructured Accelerated Power Development and Reforms Programme
REC	Renewable Energy Certificate
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
RTC	Round the Clock
SBI PLR	SBI Prime Lending Rate
SERC	State Electricity Regulatory Commission
SLDC	State Load Dispatch Centre
SOP	Standard of Performance
SRPC	Southern Regional Power Committee
T&D	Transmission & Distribution
TVS	Technical Validation Session
UI	Unscheduled Interchange
UT	Union Territory
WART	Weighted Average Retail Tariff
WRPC	Western Region Power Committee

**Before the
Joint Electricity Regulatory Commission
For the State of Goa and Union Territories, Gurugram**

QUORUM

Shri. M. K. Goel (Chairperson)

Smt. Neerja Mathur (Member)

Petition No. 249/2017

In the matter of

Approval for the True-up of the FY 2013-14, Annual Performance Review (APR) of the FY 2017-18 and Aggregate Revenue Requirement (ARR) and Tariff proposal for the FY 2018-19.

And in the matter of

Electricity Department, Government of Goa (EDG)..... Petitioner

ORDER

Dated: 28th March 2018

- a) This Order is passed in respect to the Petition filed by the Electricity Department, Government of Goa (EDG) (herein after referred to as "The Petitioner" or "EDG" or "The Licensee") for approval of True-up of the FY 2013-14, Annual Performance Review of the FY 2017-18, Aggregate Revenue Requirement (ARR) and Tariff proposal for the FY 2018-19 before the Joint Electricity Regulatory Commission (herein after referred to as "The Commission" or "JERC").
- b) On receipt of the Petition, the Commission scrutinised its contents and requisitioned further information/clarifications on the data gaps observed in the Petition to take a prudent view of the Petition. The Commission also held a Technical Validation Session to determine its sufficiency and the veracity of the information submitted. Further, suggestions/comments/objections were invited from the public/stakeholders. A Public Hearing was held and the stakeholders/public were heard. The schedule of activities performed in the course of this quasi-judicial process are given below:

Table 1: Timelines w.r.t the Petition filed by EDG

Particular	Details
Date of Admission	11th December, 2017
Public Hearing	31st January, 2017
Technical Validation Session	18th January, 2018

- c) The tariff, as detailed in the Chapter "Tariff Schedule," Open Access Charges and other provisions as approved in this Order shall come into force from 1st April, 2018 and shall remain valid till further Orders of the Commission.
- d) The licensee shall publish the revised Tariff Schedule and the salient features of tariff within one week of receipt of the Order in three daily newspapers in the respective local

languages of the region, besides English, having wide circulation in their respective areas of supply.

- e) Ordered as above, read with the attached document giving detailed reasons, grounds and conditions.

-Sd-
Neerja Mathur
(Member)

-Sd-
M.K. Goel
(Chairperson)

JOINT ELECTRICITY REGULATORY COMMISSION
(For the State of Goa and Union Territories)

Place: Gurugram

Date: 28th March, 2018.

(Certified Copy)
Keerti Tewari

1. Chapter 1: Introduction

1.1. About Joint Electricity Regulatory Commission (JERC)

In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted the Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as “Joint Electricity Regulatory Commission for the Union Territories” vide Notification No. 23/52/2003-R&R dated 2 May, 2005. Later with the joining of the State of Goa, the Commission came to be known as “Joint Electricity Regulatory Commission for the State of Goa and Union Territories” (hereinafter referred to as “JERC” or “the Commission”) vide Notification No. 23/52/2003-R&R (Vol. II) dated 30 May, 2008.

JERC is an autonomous body responsible for regulation of the Power Sector in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity etc. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting the interests of consumers and ensuring supply of electricity to all areas.

1.2. About Electricity Department, Government of Goa (EDG)

The Electricity Department was formed in January 1963 under the Government of Goa. It is the only licensee operating in the State of Goa for Transmission and Distribution of Electricity. The power requirement of the State is met through its share from Central Sector Generating Stations (CGS), Co-Generation Plants & IPP's operating within the territory and from Open Market.

1.3. JERC Tariff Regulations, 2009

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 on

9th February, 2009 applicable to the whole of the State of Goa and the Union Territories of Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Lakshadweep and Puducherry. The Regulations were applicable till the FY 2015-16 till the MYT Distribution Tariff Regulations, 2014 were notified by the Commission on 30th June 2014.

1.4. Multi-Year Distribution Tariff Regulations, 2014

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) Regulations, 2014 on 30th June, 2014 applicable for a three year Control period starting from FY 2015-16 till FY 2017-18. The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) (First Amendment) Regulations, 2015 on 10th August, 2015 shifting the MYT Control Period to FY 2016-17 to FY 2018-19. These Regulations are applicable to all the distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry.

1.5. Filing and Admission of the Present Petition

The Electricity Department, Government of Goa (EDG) filed the Petition for True-up of the FY 2013-14, APR of the FY 2016-17 and FY 2017-18 and ARR and Tariff Proposal for the FY 2018-19 vide letter dated 7th December, 2017. On preliminary scrutiny of the Petition, certain data gaps were observed on which the reply of the Petitioner was sought. The Petition was also scrutinized in terms of the JERC (Conduct of Business) Regulations, 2009. The Petition was admitted on 11th December, 2017 and numbered as Petition No. 249/2017. A letter indicating gaps in the information as well as the documentation was sent to the Petitioner.

1.6. Interaction with the Petitioner

The Order has referred at numerous places to various actions taken by the “Commission.” It may be mentioned for the sake of clarity that the term “Commission,” except for the Hearing and Orders, denotes the Secretariat of the Commission responsible for carrying out technical due diligence and validation of data of the Petitions filed by the utilities, obtaining and analysing information/clarifications received from the utilities, and submitting relevant issues for consideration of the Commission.

A preliminary scrutiny/analysis of the Petition was conducted and certain deficiencies were observed. Accordingly, deficiency notes were issued to the Petitioner. Further, additional information/clarifications/justifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petitioner and key data gaps, which included Energy Sales, revenue from retail tariff, capitalisation, tariff proposal etc. The Petitioner submitted its response on the issue through various letters.

The Commission conducted the Technical Validation Session (TVS) with the Petitioner at the Commission’s office in Gurugram, during which the discrepancies in the Petition were discussed and additional information required by the Commission were sought. Subsequently, the Petitioner submitted replies to the issues raised in these sessions and provided

documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner along with the date:

Table 2: Timelines of the interaction with the Petitioner

S. No	Subject	Date
1	Issue of First Discrepancy Note	20th December 2017
2	Reply received from Petitioner	22nd December 2017 and 15th January 2018
3	Technical Validation Session	17th January 2018
4	Issue of 2nd Discrepancy Note	18th January 2018
5	Reply received from Petitioner	7th February 2018
6	Issue of 3rd Discrepancy Note	20th February 2018
7	Reply received from Petitioner	1st March 2018
8	Public Hearing	31st January 2018

1.7. Notice for Public Hearing

Public Notices were published by the Commission in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large about the Public Hearing to be conducted by the Commission.

Table 3: Details of Public Notices published by the Commission

S. No.	Date	Name of Newspaper	Language	Place of Circulation
1.	4 th January 2018	The Times of India	English	Goa
		The Navhind Times	English	Goa
		Gomantak	Konkani (Marathi)	Goa
2.	29 th January 2018	The Times of India	English	Goa
		The Navhind Times	English	Goa
		Gomantak	Konkani (Marathi)	Goa

Copies of the Public Notices published by the Commission for intimation of the Public Hearing are attached as Annexure 1 to this Order. These notices were also uploaded on the Commission's website.

The Public Notice was published by the Petitioner in the following newspapers for inviting objections/suggestions from the stakeholders on the Tariff Petition:

Table 4: Details of Public Notices published by the Petitioner

S. No.	Date	Name of Newspaper	Language	Place of Circulation
1.	3 rd January 2018	The Navhind Times	English	Goa
2.		Gomantak	Konkani (Marathi)	Goa
3.		National Herald	English	Goa

Copies of the Public Notices published by the Petitioner for intimation of the Public Hearing are attached as Annexure 2 to this Order.

1.8. Public Hearing

The Public Hearing was held on 31st January 2017 from 10:00 A.M. onwards at “Ravindra Bhawan” at Goa to discuss the issues related to the Petition filed by the Petitioner. The issues and concerns raised by the stakeholders in writing and as voiced by them during the hearing have been examined by the Commission. The issues discussed during the public hearing and/or written comment made by the stakeholders, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter 2 of this Order.

2. Chapter 2: Summary of Suggestions/Objections received, Response from the Petitioner and the Commission's Views

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish the same in the newspapers in an abridged form in the given format duly inviting comments/objections from the public as per the provisions of the MYT Regulations, 2014.

The Public Hearing was held on 31st January 2018 from 10:00 A.M. onwards at Goa. During the Public Hearing, some of the stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written objections earlier, were also given an equal opportunity to present their views/suggestions in respect of the Petition.

The list of the stakeholders is attached as Annexure 3 to this Order.

2.2. Suggestions/Objections, Response of the Petitioner and Commission's Comments

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/comments/observations to make the process responsive and efficient. The relevant observations of the stakeholders have been suitably considered by the Commission while finalizing this Tariff Order. The submissions of the stakeholders, response of the Petitioner and views of the Commission are summarized below:

2.2.1. Procurement of power from cheaper solar energy sources

Stakeholder's Comment:

The Petitioner should procure power from cheaper solar energy sources that will reduce the power purchase cost. Further, the status of fulfillment of RPO has not been submitted.

Petitioner's Response:

It is submitted that ED-Goa has almost complied with the backlog of the Renewable Power Obligations (RPO) up to FY 2016-17, ED-Goa further submits that from FY 2017-18 onwards ED-Goa has been procuring renewable Power as per requirement to meet the Renewable Power Obligations on year on year basis. Government of Goa has issued Solar Power Policy 2017 to further enable cheaper and local power in the State of Goa. The consumers are also requested to avail the facility of net metering and earn on generating solar power and supplying to ED-Goa.

Commission's View:

The Commission has taken note of the Petitioner's submission. The Commission has dealt appropriately with the compliance towards RPO for FY 2018-19 while approving the Power Purchase Cost of FY 2018-19 in the Chapter 6 of this Order. The Petitioner has not yet submitted the Petition for True-up of FY 2016-17, therefore, the Commission is unable to verify the Petitioner's submission of clearing all the pending backlog in FY 2016-17.

The Commission directs the Petitioner to give wide publicity to the Solar Policy, 2017 and facilitate the stakeholders in Rooftop Solar Power Generation within the State of Goa. In view of cheaper renewable power available now, the Petitioner needs to continue to purchase physical solar or non-solar power to fulfill its RPO compliance.

2.2.2. Power Supply in the State is not reliable**Stakeholder's Comment:**

The quality and reliability of supply in the State is very poor in the State. Further, Power distribution infrastructure is not capable of handling the growing power demand of the State.

Petitioner's Response:

EDG has been taking several measures to improve the infrastructure of the State. ED-Goa has planned for the IT initiatives and distribution infrastructure improvement plan which broadly includes 400KV S/S at Xeldem/Dharbandora for interlinking Western Grid with Southern Grid, as any breakdown causes for black out or load shedding, additional 220/33KV S/S at Tuem, Saligao, Verna and inter connecting 220KV lines from Amona to Cuncolim, New 33/11KV Sub-station (Badem, Mandrem, Karaswada, Calangute, Sal, Altinho-Panaji, Navelim, Colva, Balli and Dhabal) to reduce loading on existing transformers, reduce 11KV feeder length and to cater additional growth, Underground cabling works, ABC works etc. Further, EDG has implemented LED lighting scheme. The scheme also includes Centralized Control and Monitoring System (CCMS) for remote switching on/off of lights which will be effective from 1st April 2018.

Commission's View:

The Commission has received various complaints against the Petitioner with regards to the quality and reliability of supply in the State. The Petitioner during the past few years has been undertaking lower capitalisation and R&M expenses than approved which clearly implies that enough efforts are not being undertaken to supply quality/reliable power to the consumers. The Commission directs the Petitioner to increase its efforts towards augmenting and maintaining the requisite infrastructure to meet the growing demand and avoid any kind of supply constraints to consumers.

2.2.3. Creation of new category for Electric Vehicles**Stakeholder's Comment:**

A new category for Electric Vehicle should be created that will cater to the increasing demand of power due to commercialization of Electric Vehicles.

Petitioner's Response:

It is submitted that determination of tariff is a matter under purview of the Commission and is determined based on the principles of Electricity Act, 2003 and National Tariff Policy 2006.

However ED-Goa submits that till the time there is development on a large scale on Electric Vehicles and Charging Stations, LT/HT Commercial Tariff be made applicable. For e.g. In Maharashtra presently LT/HT Commercial tariff is applicable if consumer uses the electricity for charging his own vehicles at his premises.

Commission's View:

The Commission has noted the submission of the Petitioner. The Commission believes that the demand for charging infrastructure for electric vehicles will increase in the near future due to increased commercialization. However, the Commission doesn't find it practical to consider the consumers under this category under LT/HT Commercial, as suggested by the Petitioner. The Commission would require the Petitioner to submit data on the number of consumers, connected load and the anticipated demand to enable the Commission to determine the tariff accurately as it will impact the Petitioner's revenue. The Petitioner in this regard is directed to submit a proposal for creation of any such category backed with the requisite data along with the next tariff petition.

2.2.4. Submission of Fixed Asset Register (FAR)**Stakeholder's Comment:**

The valuation of assets as per FAR submitted for FY 2013-14 has increased by almost two and a half times as compared to approved. The FAR has been prepared without any basis.

Petitioner's Response:

In regard to the re-valuation of assets, it is submitted that the Commission in its Tariff order dated 27th June 2012 for FY 2011-12 had considered "Nil" opening value of Gross Fixed Asset (GFA) as Audited Accounts and Fixed Asset Register were not available from FY 2006-07 onwards. Accordingly ED-Goa was directed in the said order to undertake preparation of FAR & FS on commercial/regulatory principles.

The Commission in its Order dated 23rd May 2017 has approved Gross Fixed Assets (GFA) for FY 2011-12 and FY 2012-13 post its review & prudence check, as per Audited Accounts and also taking into consideration Fixed Asset Register.

It is submitted that it is misconception of objectioner that assets are revalued and audited without any basis. It is submitted that FAR is prepared by Independent agency and the values of FAR are part of audited annual accounts which is certified by CAG from time to time for respective financial years. It is humbly submitted that asset value is same as per original cost/ /book value and it is just that Commission is considering the GFA value in truing-up process after prudence check and on receipt of audited annual accounts only.

Commission's View:

The Commission has noted the submission of the Petitioner. The valuation of the assets had been revised by the Commission in the last Tariff Order while undertaking the True-up of FY 2011-12 and FY 2012-13. This was done based on the audited FAR submitted by the Petitioner for the years prior to FY 2013-14 and after proper prudence check by the Commission. The Commission while undertaking the True-up of FY 2013-14 in this Order has considered the same opening GFA as the closing GFA as approved in the True-up of FY 2012-13. The addition in GFA has been approved based on the FAR submitted by the Petitioner for FY 2013-14 duly audited by an Independent Agency.

2.2.5. Wastage of electricity in Govt. offices**Stakeholder's Comment:**

Lights are on in government offices even during the daytime leading to wastage of power.

Petitioner's Response:

The Petitioner clarified during the hearing that officers and staff of various government offices are being briefed regularly for conservation of electricity.

Commission's View:

The Commission notes the submission of the Petitioner and advises it to regularly issue appropriate circulars to various departments/offices to make them aware about the benefits of conservation of electricity. Suitable stickers for electricity conservation at appropriate places may be pasted to remind the users to switch off the lights, when not required.

2.2.6. Implementation of Demand Side Management (DSM)**Stakeholder's Comment:**

The Petitioner should implement DSM which will help in reducing the cost of power and conserve electricity.

Petitioner's Response:

EDG has taken various measures under Demand Side Management (DSM) program which include Energy Efficiency measures also. DSM Programs are aimed to reduce consumption at consumer end and lower the peak demand. DSM also includes use of energy efficient appliances by consumers. EDG has taken various measures under LED lighting scheme, replacement of around 1.95 Lakhs conventional street light fixtures has already been done. The scheme also includes Centralised Control and Monitoring System (CCMS) for remote switching on/off of lights. Besides this, EDG has also been undertaking various DSM schemes such as:

- Jyotirmay Goa Scheme—around 8.20 lakhs LED bulbs (3 LED of 9 W to each household of Goa) were distributed under the scheme.
- UJALA (DELP)—Distribution of LED bulbs on subsidized cost to household consumers which can save energy by up to 80%.
- Street Lighting National Programme (SLNP)—Replacement of 1.66 lakh Nos. existing conventional street lights throughout the entire State of Goa by high quality energy efficient smart LED fixtures/lights with around 4200 Nos. of Centralised Control and Monitoring System (CCMS).
- Demonstration of energy efficient technologies through demonstration projects and LED village campaign.

The Petitioner shall continue undertaking a lot of these kind of initiatives for increased energy saving energy and reduce the cost of power purchase.

Commission's View:

The Commission has noted the submission of the Petitioner. The Petitioner should widely promote the initiatives among the public to create awareness. The stakeholder is requested to get in contact with the nearest EDG office to avail the benefits of these schemes. The Commission has allowed Rs 3.03 Cr towards DSM expenses in the ARR of FY 2018-19.

2.2.7. Submission of Energy Audit Report**Stakeholder's Comment:**

EDG should provide an action plan with timelines for preparation of Energy Audit Report. In case of non-compliance, the Commission should initiate action.

Petitioner's Response:

DT metering is pending for 250 Distribution Transformer (DTs) (out of total 6154 DTs). Further, the department is also facing teething issues with respect to modems, sims, communications etc. where meters are installed and the same are being addressed. EDG aims to complete DT metering within next 4-6 months. EDG also submits that non-working energy meters are being replaced. Work Order for 1.50 Lakh meters has already been issued and work is expected to commence shortly. Order for another 1.50 Lakh meters will be placed by end of FY 2017-18. Once the above activities are completed, energy audit can be taken as per directives of the Commission.

Commission's View:

The Commission directs the Petitioner to complete the process of DT and Feeder metering and take up the Energy Audit of the State on priority.

2.2.8. Unbundling and Corporatisation**Stakeholder's Comment:**

Unbundling and Corporatisation has still not happened.

Petitioner's Response:

It is submitted that ED-Goa has pursued this matter with Government of Goa and ED-Goa is yet to receive any specific directives on the same.

Commission's View:

The Commission has directed the Petitioner to submit the proposal to the State Govt. by 30th June 2018. Till such time a decision is taken by the State Govt. ring fencing of the transmission functions should be initiated. Further, it is directed that the Petitioner should increase its efforts towards making the State Load Dispatch Center (SLDC) fully operational.

2.2.9. Issue of Solar Policy**Stakeholder's Comment:**

The Petitioner has still not finalised the Solar Policy of the State.

Petitioner's Response:

It is submitted that Solar Energy Policy 2017 has been issued by Goa Energy Development Agency (GEDA) with due approval of Government of Goa.

Commission's View:

The Commission has noted the Petitioner's response. The Petitioner is directed to widely publicise the Solar Policy and upload the same on its website for the benefit of the general public. The Petitioner is also directed to submit a copy of the Policy to the Commission.

2.2.10. Residential apartments are being rented out as Commercial/Paying Guests accommodation and are still paying Domestic tariff.**Stakeholder's Comment:**

Several tourists are staying in Rent-Back-Apartments in the coastal villages of Goa but pay residential rates instead of commercial, as the Department officials are making no attempt to take any action in the matter, thereby resulting in a revenue loss of crores of rupees.

Petitioner's Response:

It is submitted that there is already a provision in the Tariff Order dated 23rd May 2017 under LT & HT Commercial category for "Houses with Rent back facilities". The consumers having houses with rent back facilities are supposed to take LT/HT Commercial connection (which has higher tariff than domestic category).

Commission's View:

The Commission has taken note of the Petitioner's submission. The Commission directs the Petitioner to ensure that every consumer is given connection based on the categories they come under to avoid any kind of malpractices. The stakeholder is requested to report specific cases, if any, to nearby EDG office so that necessary action can be taken in this regard.

2.2.11. Proposed tariff hike is not justified**Stakeholder's Comment:**

The proposed tariff hike to recover the revenue gap is not justified. No tariff hike should be done similar to the previous year.

Petitioner's Response:

It is submitted that out of total revenue gap computed for FY 2018-19, the tariff hike of less than 5% is sought and rest is funded from the budgetary support. Last year there was no tariff hike and the entire burden was borne by the Government of Goa. Considering other inflations across sectors over 2 years which is in the range of 5-8% p.a., the tariff hike of less than 5% is justified. However determination of tariff is in the purview of the Commission.

Commission's View:

The Commission has noted the Petitioner's submission. The Commission has determined the Revenue gap for the FY 2018-19 based on the revised estimate of Power Purchase Cost of FY 2018-19. The Commission believes that the tariff should progressively reflect the cost of supply. The Commission while determining the tariff for FY 2018-19 has considered the prudent cost of the Petitioner and has accordingly determined the tariff for each consumer category.

2.2.12. Implementation of LED Street Lights**Stakeholder's Comment:**

Street Lights across many areas in the villages are yet to be deployed with LED Lights

Petitioner's Response:

EDG has already completed the replacement of around 1.95 Lakhs conventional street light fixtures. The scheme also includes Centralised Control and Monitoring System (CCMS) for remote switching on/off of lights. Installation of the same is in progress. Street light is to be maintained and monitored by M/s EESL for the period of 10 years. Work is targeted for completion by March 2018. This will have energy saving of ~27 MU every year.

Commission's View:

The Commission has taken note of the Petitioner's submission. The Commission directs the Petitioner to expedite the process of replacing the conventional street lights with LED lights and submit a compliance status report of the same to the Commission at the earliest.

3. Chapter 3: True-up of FY 2013-14**3.1. Background**

The Commission issued the Order on Aggregate Revenue Requirement (ARR) and Retail Tariff for the FY 2013-14 on 31st March 2013. Subsequently, the Commission issued the Tariff Order for FY 2014-15, determining the Aggregate Revenue Requirement (ARR) and tariff for FY 2014-15 and Annual Performance Review of FY 2013-14 on 15th April 2014 (hereinafter referred to as the "APR Order").

The True-up of the FY 2013-14 is to be carried out as per Regulation 8 (2) of the JERC Tariff Regulations, 2009:

(2) (i) *After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.*

(ii) *The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.*

(3) *The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*

(4) *While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and/or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.*

(5) *For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.*

(6) *In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.*

(7) *The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category."*

In this Chapter, the Commission has analysed all the elements of actual revenue and expenses for the FY 2013-14 and has carried out the True up of expenses and revenue with reference to the actual figures (final) as per the audited accounts, after a prudence check and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

3.2. Energy Sales**Petitioner's Submission**

The Petitioner has submitted the total quantum of energy sales for FY 2013-14 as 3070.56 MU as against an approved energy sales quantum of 2961.80 MU in the APR Order.

Commission's Analysis

The Commission, after going through the submissions of the Petitioner including the audited accounts, has considered the energy sales as 3,070.56 MU as submitted by the Petitioner for the purpose of True-up of the FY 2013-14 as shown in the table on the next page:

Table 5: Energy Sales (MU) trued-up by the Commission

S. No	Category	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
	<u>A. LOW TENSION SUPPLY</u>			
1	LTD/Domestic	800.00	844.23	844.23
2	LTD/L.I.G.	2.00	8.26	8.26
3	LTD Domestic Mixed	6.00	5.00	5.00
4	LTC/Commercial	292.00	280.97	280.97
5	LTP/Motive Power	89.00	74.41	74.41
6	LTP Mixed (Hotel Industries)	5.00	4.73	4.73
7	LTP Ice Manufacturing	8.00	8.00	8.00
8	LTAG/Agriculture	16.00	17.76	17.76
9	LTPL (Public lighting)	24.00	37.23	37.23
10	LTPWW/Public Water works	6.00	2.08	2.08
11	LT Temporary	10.00	17.89	17.89
	Sub-Total	1258.00	1300.57	1300.57
	<u>B. HIGH TENSION SUPPLY</u>			
12	HT (Mixed)	112.00	117.88	117.88
13	HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive.	532.00	517.37	517.37
14	HTI Industrial	628.00	619.33	619.33
15	HTAG (Agriculture)	6.00	6.09	6.09
16	EHTI (Industrial)	184.00	142.55	142.55
17	HT P.W.W. & Sewage system	138.00	138.12	138.12
18	HT. M.E.'s Defence Estt.	24.00	26.66	26.66
19	HTI (Steel Rolling)	59.00	69.02	69.02
20	HTI/IT High Tech	20.00	66.23	66.23
21	HTI/Ice Manufacturing	0.00	0.85	0.85
22	Sale from EDG to GSPL (Div. VII)	0.00	8.70	8.70
23	HTI Hotel Industry	0.00	57.11	57.11
24	HT Temporary	0.00	0.06	0.06
	Sub-Total	1703.00	1769.99	1769.99
	Total	2961.80	3070.56	3070.56

The Commission approves the energy sales as 3070.56 MU in the True-up of FY 2013-14.

3.3. Inter-State Transmission loss

Petitioner's submission

Petitioner has submitted the Inter-State transmission loss of 4.68% against a loss of 4.47% approved in the APR Order.

Commission's analysis

The Commission has verified the Inter-State losses from the supporting documentary evidence submitted by the Petitioner and as per information available on WRPC/SRPC websites. The Commission accordingly trues-up the Inter-State Losses as shown in the table below.

Table 6: Inter-State transmission loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Inter-State Transmission Loss	4.47%	4.68%	4.68%

The Commission trues-up Inter-State Transmission Loss as 4.68% in the True-up of the FY 2013-14.

3.4. Intra-State Transmission & Distribution (T&D) loss**Petitioner's submission**

The Petitioner has submitted that it has achieved an Intra-State T&D loss of 11.16% in the FY 2013-14 against an approved loss of 12.00%.

Commission's analysis

The Petitioner in its submission has failed to submit the Energy Audit Report of the State for FY 2013-14. In the absence of the Energy Audit Report, the Commission, for verification of the Intra-State T&D loss levels has relied on the information of energy drawal at state periphery, available on the Western and Southern Region Power Committee websites and the energy sales as approved above. Therefore, in accordance with the information available on the websites, the Commission approves Intra-State T&D loss of 11.16% for the FY 2013-14 against an approved loss of 12.00% in the APR Order.

The Petitioner in the Technical Validation Session (TVS) held at the Commission's office submitted that due to change in billing agencies, EDG has witnessed a transitional change in energy accounting and billing in the past few years prior to FY 2017-18 which has resulted in distortion in energy sales. The impact of the same can be observed in FY 2013-14 as well. Therefore, in the absence of reliable sales figures for FY 2013-14, the Commission has decided not to consider any incentive for the overachievement of T&D Loss target in the FY 2013-14.

The table below provides the Intra-State T&D loss approved in the APR of FY 2013-14, Petitioner's submission and as approved by the Commission now.

Table 7: Intra-State distribution loss (%)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	T&D Losses (%)	12.00%	11.16%	11.16%

The Commission, while Trueing up for FY 2013-14, has considered the actual Intra-State T&D loss of 11.16% for the FY 2013-14.

3.5. Power Purchase Quantum & Cost

Petitioner's submission

The Petitioner submitted that it meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and Co-generating Companies like Goa Energy Pvt. Ltd and Goa Sponge & Power Ltd. Energy requirement is also met through NVVNL and through IPP (Reliance Infra). The Power Purchase Cost has been submitted as incurred by the Petitioner in FY 2013-14. The Power Purchase cost also includes ED, Cess, Incentive etc. and supplementary charges considered on actual basis.

The transmission charges comprise of transmission charges of Western Region and Southern Region.

With regards to Renewable Purchase Obligation (RPO), the Petitioner submitted that the matter has been pursued in case No. 61/2012. The Petitioner submitted that the Non-Solar RPO is being met through purchase of Co-generation power and the same has been acknowledged by the Commission vide its Order dated 27th December 2013 in case No. 61/2012.

The power purchase quantum and cost for FY 2013-14, as submitted by the Petitioner has been shown in the following table:

Table 8: Power Purchase cost submitted by the Petitioner (in Rs Cr)

S. No.	Source	Power Purchase (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Total Charges (Rs Cr)
1	2	3	4	5	6	7
A	Central Sector Power Stations					
I	NTPC	3181.02	241.72	428.33	40.05	710.10
	KSTPS	1645.01	91.43	154.89	21.04	267.37
	KSTPS - III	41.09	6.39	3.88	0.76	11.02
	VSTPS - I	231.57	18.03	31.75	5.92	55.69
	VSTPS - II	103.89	6.82	13.45	2.45	22.72
	VSTPS -III	92.82	9.80	12.03	1.85	23.68
	VSTPS-IV	49.77	7.30	6.48	0.40	14.17
	KGPP	30.71	7.96	8.30	(2.14)	14.12
	GGPP	30.33	10.39	8.52	(2.02)	16.89
	SIPAT- I	142.91	22.99	22.01	5.23	50.22
	RSTPS	725.58	43.37	152.30	4.40	200.07
	SIPAT- II	80.19	10.46	12.70	1.48	24.64
	Mouda	7.16	6.79	2.02	(1.13)	7.68
	Supplementary charges inclusive of rebate	-			1.82	1.82
II	RGPPL	13.94		8.71	(0.13)	8.58
III	NPCIL	200.21		51.98	(1.18)	50.80
	KAPS	117.98		28.34	(0.65)	27.69
	TAPS	82.23		23.64	(0.53)	23.11
IV	NET OVER-DRAWAL	32.34		24.19	0.00	24.19

1	2	3	4	5	6	7
B	Within State Generations					
I	CO-GENERATION	74.03	-	17.54	0.00	17.54
	Goa Energy Private Limited	67.65		16.08	0.00	16.08
	Goa Sponge & Power Limited	6.37		1.46	0.00	1.46
C	IPP					
	Reliance Infra	115.39		146.46	0.00	146.46
D	OTHER CHARGES	-	-	-	120.79	120.79
	PGCIL Transmission Charges, Wheeling & Other Charges				120.79	120.79
	Total	3616.94	241.72	677.20	160.71	1078.46

Commission's analysis

The Petitioner procures power mainly from NTPC Stations, NPCIL stations, Co-Generating Plants and IPP's. No power has been purchased through IEX/Bilateral Purchase etc. The Petitioner submitted the overall Power Purchase cost as Rs 1078.46 Cr inclusive of transmission charges but exclusive of revenue from UI Underdrawal/sale due to surplus power.

The Commission has verified the power purchase details as submitted by the Petitioner in its Petition with the publicly available information from the Regional Energy Accounts (REA) maintained by Western Region Power Committee (WRPC) for the Central Generating Stations (CGS). Further, apart from Western Region, the Petitioner also gets supply from the Southern Region from the NTPC's Ramagundam Thermal Power Station. The Commission has validated the power purchase details pertaining to this station from the publicly available information from the Regional Energy Accounts (REA) maintained by Southern Region Power Committee (SRPC). The Commission has verified the power purchase quantum and cost as per the monthly and station-wise bills submitted by the Petitioner. The cost has further been reconciled with the audited annual accounts of FY 2013-14.

The Petitioner has accounted for the revenue from UI Underdrawal separately and Income from Trading/Power Exchange as part of the Non-Tariff Income (NTI) and adjusted them both in the Overall ARR. Further, it has been noticed that the Petitioner although has considered the quantum of UI Underdrawal in the Total Power Purchase Quantum but has omitted the revenue pertaining to this UI Underdrawal in the Total Power Purchase Cost. The Commission, for the purpose of finalization of the Power Purchase Cost in the True up of FY 2013-14 has considered both the Income from UI Underdrawal and Trading/Power Exchange along with the Power Purchase cost approved now.

Other expenses such as the Transmission Charges and the Other Charges submitted have been considered as per actuals incurred by the Petitioner.

The Petitioner submitted that no cost has been incurred towards the compliance of Renewable Purchase Obligation (RPO) in FY 2013-14. The compliance status of RPO has been discussed in detail in the subsequent section. The table below provides the summary of the power purchase quantum and the cost approved by the Commission for FY 2013-14.

Table 9: Power Purchase Quantum (MU) and cost (Rs Cr) approved by the Commission

S. No.	Source	Power Purchase (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Other Charges (Rs Cr)	Total Charges (Rs Cr)
A	Central Sector Power Stations					
I	NTPC	3181.02	241.72	428.33	40.05	710.10
	KSTPS	1645.01	91.43	154.89	21.04	267.37
	KSTPS - III	41.09	6.39	3.88	0.76	11.02
	VSTPS - I	231.57	18.03	31.75	5.92	55.69
	VSTPS - II	103.89	6.82	13.45	2.45	22.72
	VSTPS -III	92.82	9.80	12.03	1.85	23.68
	VSTPS-IV	49.77	7.30	6.48	0.40	14.17
	KGPP	30.71	7.96	8.30	(2.14)	14.12
	GGPP	30.33	10.39	8.52	(2.02)	16.89
	SIPAT- I	142.91	22.99	22.01	5.23	50.22
	RSTPS	725.58	43.37	152.30	4.40	200.07
	SIPAT- II	80.19	10.46	12.70	1.48	24.64
	Mouda	7.16	6.79	2.02	(1.13)	7.68
	Supplementary charges inclusive of rebate	-			1.82	1.82
II	RGPP	13.94		8.71	(0.13)	8.58
III	NPCIL	200.21		51.98	(1.18)	50.80
	KAPS	117.98		28.34	(0.65)	27.69
	TAPS	82.23		23.64	(0.53)	23.11
IV	Unscheduled Interchange/Sale of Surplus Power/ Trading	32.34	-	12.58	-	12.58
	UI Over-drawal	107.02	-	24.19	-	24.19
	Less: UI Underdrawal/ Income from sale of Surplus Power/Trading	74.68	-	11.61	-	11.61
B	Within State Generations	189.42	-	164.00	-	164.00
I	Co-Generation	74.03	-	17.54	0.00	17.54
	Goa Energy Private Limited	67.65		16.08	0.00	16.08
	Goa Sponge & Power Limited	6.37		1.46	0.00	1.46
II	IPP	115.39	-	146.46	0.00	146.46
	Reliance Infra	115.39	-	146.46	0.00	146.46
C	Other Charges	-	-	-	120.79	120.79
	PGCIL Transmission Charges, Wheeling & Other Charges				120.79	120.79
	Total	3616.94	241.72	665.59	159.53	1066.85

The Commission approves power purchase quantum of 3616.94 MU and cost of Rs 1066.85 Cr in the True-up of the FY 2013-14.**3.6. Renewable Purchase Obligation (RPO)**

As per Clause 1, sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

“Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year.”

The Commission, in its Business Plan Order dated 22nd December, 2015 issued in the Petition No. 186/2015, had reiterated that all the pending RPOs upto the FY 2015-16 must be fulfilled by the Petitioner by 31st March, 2016 and no backlog would be allowed to be carried forward to the MYT Control Period from FY 2016-17 to FY 2018-19.

The Petitioner for FY 2013-14 has not incurred any costs towards compliance of RPOs as mentioned in the previous section. The Petitioner has further submitted that it has completely fulfilled its RPO (both solar and non-solar) target till FY 2015-16 partly by way of purchase of physical power and partly by RECs.

The Petitioner had made the similar submission before the Commission in the True-up of FY 2011-12 and FY 2012-13 in the previous Tariff Order. The Commission at that time had not accounted for any cost or disincentive towards non-compliance of RPO till FY 2012-13. The Commission believed that since the actual cost towards compliance has been incurred only in FY 2015-16, therefore, the same shall be accounted for in the True-up for FY 2015-16.

In view of the above and keeping similar approach as adopted by the Commission towards RPO Compliance in True-up of FY 2011-12 and FY 2013-14, the Commission has not considered any cost towards RPO compliance in the FY 2013-14. The same shall be considered at the time of True-up of the FY 2015-16.

3.7. Energy Balance**Petitioner's submission**

The Petitioner has submitted the energy balance as shown in the following table.

Table 10: Energy Balance (MU) submitted by Petitioner

S. No.	Particulars	Petitioner's Submission
1	2	3
1	Energy Input at Goa Periphery	3267.02
2	Total Power Scheduled/Purchased at Goa Periphery	
	Total Schedule Billed Drawal - CGS	3395.17
	Add: Over-drawal	107.02
	Add: Power purchase from NVVN/Banking	-
	Add: Power purchase from Traders/Open Market	-
	Less: Underdrawal	74.68
	Add: Renewable Power	-
	Less: Power diverted to Exchange	-
	Total	3427.52
3	PGCIL Losses - MUs	160.50
	PGCIL Losses - %	4.68%

1	2	3
4	Total Power Purchased within Goa State	
	Add: Co-generation	74.03
	Add: Independent Power Producers (IPP)	115.39
	Total	189.42
5	Total Power Purchase availability after PGCIL Losses	3456.44
	Less: Retail Sales to Consumers	3070.56
	Distribution Losses - MUs	385.88
6	Distribution Losses - %	11.16%

Commission's analysis

The information submitted by the Petitioner on power purchase quantum, UI over/under drawl, IEX/Bilateral purchase etc. has been examined and accordingly the energy balance for FY 2013-14 has been derived. The Commission has determined the energy balance at the Periphery of the State of Goa. The following table provides the energy balance approved in the APR of FY 2013-14, the Petitioner's submission and now trued-up by the Commission.

Table 11: Energy Balance (MU) approved by Commission at State Periphery

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
A	Energy Requirement			
1	Energy sales within the State/UT	2961.80	3070.56	3070.56
2	Distribution losses			
	%	12.00%	11.16%	11.16%
	MU	385.72	385.72	385.72
3	Energy required at State Periphery	3365.68	3456.28	3456.28
B	Energy Transactions at Periphery			
1	Energy Availability from CGS stations	3313.76	3423.93	3423.93
(a)	Total availability from sources outside State	3225.74	3234.51	3234.51
(b)	Total availability from sources within State	88.02	189.42	189.42
2	UI Over drawal	77.75	107.02	107.02
3	UI/Under drawal	33.58	74.68	74.68
4	Banking Arrangement	7.75	-	-
5	Total Availability at State Periphery (1+2-3+4)	3365.68	3456.28	3456.28

3.8. Operation & Maintenance (O&M) Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). The O&M Expenses have been approved in accordance with the Tariff Regulations, 2009 and the audited accounts submitted by the Petitioner for FY 2013-14.

3.8.1. Employee Expenses

Petitioner's submission

The Petitioner has incurred actual employee expenses of Rs 170.07 Cr against the approved expenses of Rs 144.21 Cr in the APR of FY 2013-14.

The following table provides the employee expenses as submitted by the Petitioner:

Table 12: Employee Expenses submitted by the Petitioner (In Rs Cr)

S. No.	Particulars	Petitioner's Submission
1	Salary	170.07
2	Wages	
3	Stipend	
4	Transport Allowance	
5	Overtime allowance	
6	Total	170.07
7	Less: Add/Deduct share of others	-
8	Total	170.07
9	Less: Amount capitalized	-
10	Net amount	170.07
11	Add: Pension/DA and other Provision	-
12	Total Employee Expenses	170.07

The Petitioner further submitted that the Employee Expenses for FY 2013-14 are on the higher side, on account of increase in Dearness Allowance, HRA and travel allowance, out of which the Dearness Allowance is an uncontrollable factor. The Dearness Allowance accounts to approx. 35% to 40% of the total employee expenses.

Commission's analysis

The Commission observes that the employee expenses approved in the past were based on the estimates prepared on cash basis and not accrual basis. The Petitioner had submitted and prepared the audited accounts prepared on commercial principles for the first time in the previous Tariff Order while undertaking the True-up of FY 2011-12 and FY 2012-13.

Since, the Base Employee Expenses considered while projecting the Employee Expenses for FY 2013-14 in the APR of FY 2013-14 were determined differently, the Commission finds it appropriate to consider the actual employee costs as available in the audited accounts for the purpose of the True-up of the FY 2013-14.

Further, the Petitioner has considered an expense towards CGRF of Rs 0.33 Cr separately in the ARR. The Commission, for the purpose of True-up, has considered this expense along with the Employee Expenses due to its inherent nature.

The table below provides the employee expenses approved in the APR Order, submitted by the Petitioner and now approved by the Commission.

Table 13: Employee Expenses approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	144.21	170.07	170.07
2	Expense towards CGRF	-	-	0.33
3	Total Employee Expenses	144.21	170.07	170.40

The Commission approves Employee Expenses of Rs 170.40 Cr in the True-up of FY 2013-14.

3.8.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has incurred A&G expenses of Rs 18.54 Cr against the approved expenses of Rs 9.08 Cr in the APR Order.

The following table provides the A&G expenses as submitted by the Petitioner:

Table 14: A&G Expenses submitted by Petitioner (In Rs Cr)

S. No.	Particulars	Petitioner's Submission
1	Travelling Expenses	0.39
2	Office Expenses	13.51
3	Regulatory Expenses (License + Petition Fees)	0.00
4	Petrol, Oil, Lubricant (P.O.L.)	0.00
5	Rent, Rates & Taxes	0.29
6	Advertisement & Publicity	0.26
7	Professional & Special Services	0.97
8	Other A&G Charges	1.46
9	Overtime Allowance	0.00
10	Minor Works	1.66
11	Legal, Professional & Special Service Charges	0.00
12	Total A&G Expenses	18.54

Commission's analysis

Similar to the approach followed while approving the Employee Expenses, the Commission approves the A&G Expenses as per the audited accounts for the purpose of True-up of the FY 2013-14. The table below provides the A&G Expenses approved in the APR of FY 2013-14, the Petitioner's submission and the expenses now approved by the Commission.

Table 15: A&G Expenses approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Administration & General Expenses (A&G)	9.08	18.54	18.54

The Commission approves the Administrative & General (A&G) expenses of Rs 18.54 Cr in the True-up of FY 2013-14.

3.8.3. Repair & Maintenance Expenses (R&M)

Petitioner's submission

The Petitioner has incurred R&M expenses of Rs 21.45 Cr against the approved expenses of Rs 19.61 Cr in the APR Order. The Petitioner submitted that it has been undertaking various R&M activities as a step towards improvement of systems, reduction in breakdowns, and reduction in response time and increasing preventive maintenance. R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standards of Performance of the Petitioner.

Commission's analysis

Similar to the approach followed while approving the Employee expenses and A&G expenses above, the Commission approves the R&M Expenses as per actual audited accounts of FY 2013-14:

Table 16: R&M Expenses approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Repair & Maintenance Expenses (R&M)	19.61	21.45	21.45

The Commission approves the Repair & Maintenance (R&M) expenses of Rs 21.45 Cr in the True-up of FY 2013-14.

3.8.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M Expenses approved in the APR of FY 2013-14, Petitioner's submission and O&M now trued-up by the Commission.

Table 17: O&M Expenses approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Employee Expenses	144.21	170.07	170.40
2	Administrative & General Expenses (A&G)	9.08	18.54	18.54
3	Repair & Maintenance Expenses	19.61	21.45	21.45
	Total Operation & Maintenance Expenses	172.90	210.06	210.39

The Commission approves the Operation & Maintenance (O&M) expenses of Rs 210.39 Cr in the True-up of FY 2013-14.

3.9. Capitalisation**Petitioner's submission**

The Petitioner submitted the actual capitalisation for the FY 2013-14 as Rs 66.35 Cr against an approved capitalization of Rs 191.44 Cr

Commission's analysis:

The Commission with regards to capitalisation submitted by the Petitioner, sought details of the assets created out of Loan/Equity/Govt. Grant/Consumer Contribution etc. In reply, the Petitioner submitted that majority of capital assets are created out of the equity contribution from Govt. of Goa and the actual borrowing of loan is only to the extent of the R-APDRP scheme. The capitalization is inclusive of assets created out of the Electricity Development Fund which is treated as Government Grant. The Petitioner further submitted that no assets have been created out of Consumer Contribution.

It is observed that the capital expenditure and capitalisation achieved by the Petitioner is much lower than approved by the Commission in the APR Order. Lower capital expenditure signifies that enough efforts have not been undertaken in enhancing the reliability of supply to consumers. It also signifies that sufficient measures aren't being taken to provide electricity

supply to un-electrified areas and equipping the distribution infrastructure with the growing demand. Accordingly, the Commission directs the Petitioner to increase its efforts towards undertaking capital expenditure activities necessary for improving the service quality and targeting 24x7 supply to all consumers.

The Commission has examined the Fixed Asset Register (FAR) as submitted by the Petitioner in detail and accordingly approves the capitalisation as shown in the following table.

Table 18: Capitalisation approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	RAPDRP Scheme	-	10.06	10.06
2	Electricity Development Fund (EDF)	-	20.00	20.00
3	Other Plan Schemes	-	36.29	36.29
	Total Capitalisation	191.44	66.35	66.35

The Commission approves Capitalisation of Rs 66.35 Cr in the True-up of FY 2013-14.

3.10. Depreciation

Petitioner's submission

The Petitioner has submitted the actual depreciation of assets as per the audited annual accounts of FY 2013-14. The depreciation is arrived in annual accounts for FY 2013-14 based on the rates specified by the Commission in the Tariff Regulations, 2009.

The depreciation as claimed by the Petitioner has been tabulated in the table below:

Table 19: Depreciation submitted by Petitioner (In Rs Cr)

S. No	Particulars	Petitioner's Submission
1	Opening Gross Fixed Assets	816.84
2	Addition During the FY	66.35
3	Adjustment/Retirement during the FY	0.00
4	Closing Gross Fixed Assets	883.20
	Depreciation	39.57

Commission's analysis

In respect of depreciation, the Commission has followed Regulation 26 of the Tariff Regulations, 2009, as under:

"26. Depreciation

(1) For the purpose of tariff, depreciation shall be computed in the following manner:

(i) The value base for the purpose of depreciation shall be the historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission:

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation.

(ii) The historical cost of the asset shall include additional capitalization.

(iii) The historical cost shall include foreign currency funding converted into equivalent rupees at the exchange rate prevalent on the date when foreign currency was actually availed but not later than the date of commercial operation.

(iv) Depreciation for generation and transmission assets shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time.

As per the norms specified in the Tariff Regulations, 2009 the Commission has verified the asset wise capitalisation of the Petitioner and has accordingly derived the weighted average rate of depreciation based on the asset wise depreciation rate prescribed in the CERC Tariff Regulations, 2009, given in the following table:

Table 20: Depreciation Rate (%)

Description	Rate
Plant & Machinery	5.28%
SCADA Centre	5.28%
Testing & Measuring Equipment	5.28%
Lines & Cables	5.28%
Buildings	3.34%
Vehicles	9.50%
Furniture & Fixtures	6.33%
Office Equipment	6.33%
Computers & Others	15.00%
Land	0.00%

Based on the above depreciation rates and the actual asset addition during the year the weighted average depreciation rate is computed as 5.27% against a rate of 5.28% approved in the APR Order. The Commission has not considered depreciation on assets created from the Electricity Duty Fund as the same has been treated as a Grant from the Government of Goa.

The Commission has calculated the depreciation on average Gross Fixed Assets (GFA) with the opening GFA considered equivalent to the closing GFA as approved in the True-Up of FY 2012-13, in the Order dated 23rd May, 2017. It is pertinent to mention here that the Commission had revised the GFA value in accordance with the Fixed Asset Register (FAR) of FY 2011-12 and FY 2012-13 while undertaking the True-up of the respective years. Accordingly, the Commission approves the GFA and Depreciation as per the revised opening balance of FY 2013-14. The following table provides the calculation of depreciation during the FY 2013-14:

Table 21: Depreciation approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Gross Fixed Assets	207.30	816.84	816.84
2	Addition During the FY	191.44	66.35	66.35
3	Less: Addition on account of EDF/ Grant	0.00	0.00	20.00
4	Closing Gross Fixed Assets	398.74	883.20	863.19
5	Average Gross Fixed Assets	303.02	-	840.02
6	Weighted average Rate of Depreciation (%)	5.28%	-	5.27%
	Depreciation	16.00	39.57	44.29

The Commission approves depreciation of Rs 44.29 Cr in the True-up of FY 2013-14.**3.11. Interest and Finance Charges****Petitioner's submission**

The Petitioner submitted that majority of capital assets are created out of the equity contribution from the Government of Goa. Interest on Loan has been estimated based on the normative loan calculation whereby 70% of the opening GFA and the capitalization during the year have been considered as normative debt. The Interest expense arrived is based on normative loan considered to the extent of capitalization during the year after deducting the Electricity Duty available as Grant.

Opening balance of normative loan for FY 2013-14 considered as per the approved normative loan in truing up of FY 2012-13. Further, the rate of interest has been considered as State Bank of India Prime Lending Rate (SBI PLR) of 14.45% (rate as on 1st April, 2013).

In addition to the above, the Petitioner has also claimed certain financial charges related to bank charges, LC charges, etc.

Commission's analysis:

Regulation 25 of the Tariff Regulations, 2009 states:

" 1) For existing loan capital interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the rate of interest and schedule of repayment as per the terms and conditions of relevant agreements.

2) Interest and finance charges on loan capital for new investments shall be computed on the loans, duly taking into account the rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall, however, be restricted to the prevailing Prime Lending Rate of the State Bank of India." (Read SBI Advance Rate)

Further as per Regulation 23 of the said Tariff Regulations, 2009:

"23. Debt-Equity Ratio

1) For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:

2) Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public.

3) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation:

4) Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948."

Accordingly, the Commission for the purpose of funding of the capitalisation has considered the normative debt-equity ratio of 70:30. The addition in loan has been considered with respect to

the total capitalization during the year excluding the assets created out of the Electricity Duty Fund.

The Commission for the purpose of calculation of Interest on Loan has considered an interest rate equivalent to the SBI PLR @ 14.45%, as on 1st April, 2013. The interest has been calculated on the average loan during the year with the opening loan considered equivalent to the closing loan approved in the True-Up of FY 2012-13. Repayment of the loan has been considered at 10% of the opening loan amount. Additionally, the Commission also allows expenditure towards financing charges as per actuals as reflected in the annual accounts.

The following table provides the Interest and Finance charges as approved by the Commission:

Table 22: Interest and Finance charges approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	136.29	148.07	148.07
2	Add: Normative Loan during the year	134.01	28.22	32.45
3	Less: Normative Repayment equivalent to 10% of opening normative loan	13.63	14.81	14.81
4	Closing Normative Loan	256.67	161.48	165.71
5	Average Normative Loan	196.48	154.78	156.89
6	Rate of Interest (%)	7.99%	14.45%	14.45%
7	Interest on Loan	15.70	22.37	22.67
8	Financing Charges	1.00	1.48	1.48
	Interest and Finance Charges	16.70	23.84	24.15

The Commission approves Interest and Finance Charges of Rs 24.15 Cr in the True-up of the FY 2013-14

3.12. Return on Capital Base

Petitioner's submission

The Petitioner has calculated the return on capital base at 3%. The return is calculated on the Net Fixed Assets (NFA) considering Gross Block inclusive of Capital Works in Progress (CWIP) and thereby deducting the accumulated depreciation.

Commission's analysis:

Regulation 24 (1) of the JERC Tariff Regulations, 2009 with regards to Return in Equity specifies the following:

"Subject to the proviso to Regulation 23(2), Return on Equity shall be computed on the paid up equity capital determined in accordance with Regulation 23 and shall be guided by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 as amended by the CERC from time to time. The same principles will apply for distribution business also as far as possible."

The Commission, similar to the methodology adopted in the True-ups of FY 2011-12 and FY 2012-13 in the Tariff Order of last year, has determined the Return on Capital Base based on the Gross Fixed Assets as approved above and the Opening Cumulative Depreciation as on 1st April, 2013, as reflected in the audited annual accounts. The table below shows the computation of the Return on Capital Base as approved in the APR Order, the Petitioner's submission and the Return now approved by the Commission.

Return on Capital Base approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Gross Fixed Assets at the beginning of FY	207.30	1304.08	816.84
2	Less: Opening accumulated depreciation as per annual audited accounts	12.13	217.42	217.42
3	Net Fixed Assets	195.17	1086.66	599.42
	Return at 3% of NFA	5.86	32.60	17.98

The Commission approves a Return on Capital Base as Rs 17.98 Cr in the True-up of FY 2013-14.

3.13. Interest on Security Deposits

Petitioner's submission

The Interest on Security Deposit calculated by the Petitioner on normative basis has been shown in the table below:

Table 23: Interest on Consumer Security Deposits submitted by Petitioner (In Rs Cr)

S. No.	Particulars	Petitioner's Submission
1	Opening Security Deposit	17.17
2	Add: Deposits During the year	8.26
3	Less: Deposits refunded	4.33
4	Closing Security Deposit	21.09
5	Average Security Deposit	19.13
6	Rate of Interest (%)	8.50%
7	Interest on Security Deposit	1.63
8	Interest paid to consumers	0.00

The Petitioner has determined the Interest on Security Deposits on normative basis as per Tariff Regulations, 2009 but has not considered the same in the ARR as no interest has been paid to consumers in the FY 2013-14.

Commission's analysis:

As the Petitioner has not paid any Interest on Security Deposit to consumers, the Commission does not approve any Interest on Security Deposit in FY 2013-14. The following table provides the interest on security deposit as approved in the APR of FY 2013-14, the Petitioner's submission and the interest now approved by the Commission:

Table 24: Interest on Consumer Security Deposits approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Interest on Security Deposit	5.42	0.00	0.00

The Commission approves Interest on Security Deposit as nil in the True-up of FY 2013-14.

3.14. Interest on Working Capital**Petitioner's submission**

The Petitioner has determined the Interest on Working Capital on normative basis considering sum of the following:

- a. Power purchase cost.
- b. Employees cost.
- c. Administration & general expenses.
- d. Repair & Maintenance expenses.
- e. Sum of two months requirement for meeting Fuel cost.

The Interest Rate has been considered as SBI PLR as on 1st April, 2013.

Commission's analysis:

As per Regulation 29 of the Tariff Regulations, 2009:

“(3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:

- a. Power purchase cost.*
- b. Employees cost.*
- c. Administration & general expenses.*
- d. Repair & Maintenance expenses.*
- e. Sum of two month requirement for meeting Fuel cost.*

5) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company/licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.”

The Commission has considered the calculation of the different components of the Working Capital on the basis of the stipulated norms. The Commission has deducted average consumer security deposit from the Working Capital requirement as reflected in the audited annual accounts of FY 2013-14. The Commission has considered the SBI PLR as applicable on 1st April, 2013. Accordingly, the Interest on Working Capital has been calculated, as shown in the table below:

Table 25: Interest on Working Capital approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost for one month	77.09	89.87	88.90
2	Employee Cost for 1 month	12.02	14.17	14.20
3	A&G Cost for 1 month	0.76	1.55	1.55
4	R&M Cost for 1 month	1.63	1.79	1.79
5	Total Working Capital for 1 month	91.50	107.38	106.44
6	Average Security Deposit	64.95	17.17	19.13
7	Total Working Capital considered for 1 month	26.55	90.21	87.31
8	SBI PLR	14.45%	14.45%	14.45%
	Interest on Working Capital	3.84	13.04	12.62

The Commission approves the Interest on Working Capital as 12.62 Cr in the True-up of FY 2013-14.

3.15. Provision for Bad & Doubtful Debts**Petitioner's submission**

The Petitioner submitted that it has created a provision of Rs 2.96 Cr towards Bad and Doubtful Debts in the annual accounts of FY 2013-14.

Commission's analysis:

As specified in Regulation 28 of the Tariff Regulations, 2009 (to be read with the format):

"The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee."

It is observed that as per the audited accounts, the licensee has not written off any amount in the FY 2013-14. Therefore, the Commission does not approve any amount under the provision for bad and doubtful debts.

The Commission approves nil provision of Bad & Doubtful Debts in the True-up of FY 2013-14.

3.16. Non-Tariff Income (NTI)**Petitioner's submission**

The Petitioner submitted NTI of Rs 17.02 Cr in the True-Up of FY 2013-14 against Rs 22.55 Cr approved by the Commission in the ARR for FY 2013-14. The Non-Tariff Income as submitted by the Petitioner has been shown in the table below:

Table 26: Non-Tariff Income as submitted by Petitioner (In Rs Cr)

S. No.	Particulars	Petitioner's Submission
1	Meter Rent	3.81
2	Revenue from Power Exchange	0.75
3	Misc./Other Receipts	11.94
4	Income from trading of Power	0.52
	Total	17.02

Commission's analysis:

The Commission has authenticated the submission of the Petitioner from the audited accounts and found the same to be correct. Further, the Commission as discussed while truing up the Power Purchase Cost had considered the revenue from Trading of Power and Power Exchange as part of the Power Purchase Cost. Accordingly, the Commission approves the same remaining NTI as submitted by the Petitioner. The NTI approved in the APR Order, Petitioner's submission and now approved by the Commission is shown in the table below:

Table 27: Non-Tariff Income approved by Commission (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Meter Rent	-	3.81	3.81
2	Revenue from Power Exchange	-	0.75	-
3	Misc./Other Receipts	-	11.94	11.94
4	Income from trading of Power	-	0.52	-
	Total	23.22	17.02	15.76

The Commission approves Non-Tariff Income of Rs 15.76 Cr in the True-up of FY 2013-14.

3.17. Revenue from Sale of Surplus Power

Petitioner's submission

The Petitioner has earned a revenue of Rs 10.34 Cr from sale of surplus power/UI Underdrawal.

Commission's analysis:

The Commission as discussed while approving the Power Purchase Cost has considered the revenue from sale of surplus power/UI Underdrawal along with the Total Power Purchase Cost due to its inherent nature.

The revenue from sale of surplus power/UI Underdrawal as approved in the APR Order, Petitioner's submission and now trued-up by the Commission is shown in the following table:

Table 28: Non-Tariff Income approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Revenue from sale of surplus power/UI Underdrawal	8.38	10.34	10.34

The Commission approves Rs 10.34 as revenue from sale of surplus power/ UI Overdrawal and has considered the same along with the Total Power Purchase cost approved in the True-up of FY 2013-14.

3.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of Rs 1373.50 Cr is submitted for approval in the True-up of FY 2013-14.

Commission's analysis

The Commission on the basis of the detailed analysis of the cost parameters of the ARR has considered and approved the revenue requirement in the True-up of FY 2013-14 as given in the following table:

Table 29: Aggregate Revenue Requirement approved by Commission for FY 2013-14 (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost	933.41	1078.46	1066.85
2	Provision for RPO Compliance	29.42		
3	Operation & Maintenance Expenses	172.90	210.06	210.39
4	Depreciation	16.00	39.57	44.29
5	Interest and Finance charges	16.70	23.84	24.15
6	Interest on Working Capital	3.84	13.04	12.62
7	Interest on Security Deposit	5.42	0.00	0.00
8	Return on Equity	5.86	32.60	17.98
9	Provision for Bad Debt	0.00	2.96	0.00
10	Other Expenses	0.56	0.33	0.00
12	Total Revenue Requirement	1184.11	1400.86	1376.27
13	Less: Non-Tariff Income	22.55	17.02	15.76
14	Revenue from sale of surplus power/UI Overdrawal	8.38	10.34	- *
	Net Revenue Requirement	1153.17	1373.50	1360.51
*Adjusted in Power Purchase Cost				

The Commission approves net Aggregate Revenue Requirement of Rs 1360.51 Cr in the True-up of FY 2013-14.

3.19. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the net actual revenue for the FY 2013-14 as Rs 1060.29 Cr against revenue of 990.86 Cr approved by the Commission in the APR Order. The table below provides the revenue at existing tariff as submitted by the Petitioner:

Table 30: Revenue at existing tariff submitted by the Petitioner for FY 2013-14 (In Rs Cr)

S. No	Category	Sales (MU)	Total Revenue (Rs Cr)	ABR (Rs/kwh)
	<u>A. LOW TENSION SUPPLY</u>			
1	LTD/Domestic	844.23	172.74	2.05
2	LTD/L.I.G.	8.26	1.15	1.39
3	LTD Domestic Mixed	5.00	1.67	3.34
4	LTC/Commercial	280.97	119.86	4.27
5	LTP/Motive Power	74.41	26.85	3.61
6	LTP Mixed (Hotel Industries)	4.73	2.62	5.54
7	LTP Ice Manufacturing	8.00	2.60	3.25
8	LTAG/Agriculture	17.76	3.20	1.80
9	LTPL (Public lighting)	37.23	13.39	3.60
10	LTPWW/Public Water works	2.08	0.99	4.78
11	LT Temporary	17.89	13.33	7.45
	Sub-Total	1300.57	358.39	2.76
	<u>B. HIGH TENSION SUPPLY</u>			
12	HT (Mixed)	117.88	52.15	4.42
13	HTI (Industrial) Ferro Metallurgical/ /Steel Melting/Power Intensive	517.37	193.00	3.73
14	HTI Industrial	619.33	239.96	3.87
15	HTAG (Agriculture)	6.09	1.35	2.22
16	EHTI (Industrial)	142.55	56.82	3.99
17	HT P.W.W. & Sewage system	138.12	69.50	5.03
18	HT. M.E.'s Defence Estt.	26.66	9.70	3.64
19	HTI (Steel Rolling)	69.02	28.04	4.06
20	HTI/IT High Tech	66.23	24.43	3.69
21	HTI/Ice Manufacturing	0.85	0.33	3.87
22	Sale from EDG to GSPL (Div. VII)	8.70	3.61	4.15
23	HTI Hotel Industry	57.11	22.93	4.01
24	HT Temporary	0.06	0.08	11.56
	Sub-Total	1769.99	701.90	3.97
	Total	3070.56	1060.29	3.45

Commission's analysis

The Commission has verified revenue from the sale of power within the State in the FY 2013-14 from the audited accounts.

The category-wise revenue as approved in the APR Order, the Petitioner's submission and the revenue now Trued-up by the Commission is shown in the following table:

Table 31: Revenue at existing tariff approved by Commission for FY 2013-14 (In Rs Cr)

S. No.	Category	Approved in APR Order	Petitioner's Submission	Now Approved by Commission
	<u>A. LOW TENSION SUPPLY</u>			
1	LTD/Domestic	152.00	172.74	172.74
2	LTD/L.I.G.	0.73	1.15	1.15
3	LTD Domestic Mixed	2.00	1.67	1.67
4	LTC/Commercial	100.00	119.86	119.86
5	LTP/Motive Power	33.00	26.85	26.85
6	LTP Mixed (Hotel Industries)	1.99	2.62	2.62
7	LTP Ice Manufacturing	2.50	2.60	2.60
8	LTAG/Agriculture	2.71	3.20	3.20
9	LTPL (Public lighting)	6.61	13.39	13.39
10	LTPWW/Public Water works	1.47	0.99	0.99
11	LT Temporary	9.11	13.33	13.33
	Sub-Total	312.12	358.39	358.39
	<u>B. HIGH TENSION SUPPLY</u>			
12	HT (Mixed)	47.14	52.15	52.15
13	HTI (Industrial) Ferro Metallurgical/ Steel Melting/Power Intensive.	188.00	193.00	193.00
14	HTI Industrial	262.36	239.96	239.96
15	HTAG (Agriculture)	0.89	1.35	1.35
16	EHTI (Industrial)	70.48	56.82	56.82
17	HT P.W.W. & Sewage system	48.47	69.50	69.50
18	HT. M.E.'s Defence Estt.	8.86	9.70	9.70
19	HTI (Steel Rolling)	29.00	28.04	28.04
20	HTI/IT High Tech	23.25	24.43	24.43
21	HTI/Ice Manufacturing	0.21	0.33	0.33
22	Sale from EDG to GSPL (Div. VII)	-	3.61	3.61
23	HTI Hotel Industry	-	22.93	22.93
24	HT Temporary	0.08	0.08	0.08
	Sub-Total	678.74	701.90	701.90
	Total	990.86	1060.29	1060.29

The Commission approves the revenue from the sale of power as Rs 1060.29 Cr in the True-up of the FY 2013-14.

3.20. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, the standalone revenue gap of Rs 313.21 Cr is arrived at in the True-up of FY 2013-14.

Commission's analysis

The Commission, based on the approved ARR and the retail tariff has arrived at the Revenue Gap/Surplus as follows:

Table 32: Standalone Revenue Gap/Surplus approved by Commission for FY 2013-14 (In Rs Cr)

S. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Net Revenue Requirement	1153.17	1373.50	1360.51
2	Total Revenue	1014.05*	1060.29	1060.29
	Net Gap/(Surplus)	139.12	313.21	300.22
*Inclusive of FPPCA of Rs. 23.19 Cr.				

The Commission, in the True-up of FY 2013-14 approves a standalone gap of Rs 300.22 Cr. The Petitioner has submitted that the entire gap for the FY 2013-14 is committed to be funded by the Government of Goa by way of budgetary support. The Petitioner in this regard had submitted the letter dated 1st March, 2013 from the Government of Goa wherein the Govt. had assured that it would provide the requisite budgetary support to meet the deficit at the existing tariff for the FY 2013-14. In view of the budgetary support for the FY 2013-14 from the Government of Goa, the Commission approves Nil net revenue gap in the True-up for the FY 2013-14.

4. Chapter 4: True-up of the FY 2014-15, FY 2015-16 and FY 2016-17

4.1. Applicable provisions of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009

The True-ups of FY 2014-15 and FY 2015-16 are to be carried out as per Regulation 8 (2) of the Tariff Regulations, 2009:

(2) (i) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.

(ii) The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

(3) The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.

(4) While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and/or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

(5) *For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.*

(6) *In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.*

(7) *The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category."*

The True-up of FY 2016-17 the 1st year of the MYT Control Period, is to be carried out as per Regulation 8 (2) of the MYT Regulations, 2014:

"8. Annual Review of Performance and True-up

(2) *After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures or the provisional actual accounts as available as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.*

The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.

(3) *The revenue gap/surplus, if any, of the ensuing year shall be adjusted as a result of review and truing up exercises.*

(4) *While approving such expenses/revenue to be adjusted in the future years as arising out of the Review and/or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenue. Carrying costs shall be limited to the interest rate approved for working capital borrowings.*

(5) *For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is due to conditions beyond its control.*

(6) *In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such additional supply of power.*

4.2. Approach for the True-up of the FY 2014-15 and FY 2015-16 and FY 2016-17

Petitioner's submission:

The Petitioner submitted that the finalization of audited accounts for the FY 2014-15 and FY 2015-16 is in process and the Commission shall be approached for truing-up at a later date when the audited accounts are available. Further, the provisional figures are available for FY 2016-17 and the finalization of accounts is under process. Based on the provisional accounts, the Petitioner has requested to approve the provisional actual figures of the FY 2016-17 for determination of ARR & Revenue gap and treatment thereof.

Commission's analysis:

The Commission notes that the Petitioner has not submitted the audited accounts prepared on commercial principles for the FY 2014-15, FY 2015-16 and FY 2016-17. The Commission in its previous Orders had stressed upon the requirement of the audited accounts to bring in more accuracy in the estimates made by the Commission. The Tariff Regulations, 2009 and MYT Regulations, 2014 also require the licensee to file the True up along with the audited accounts in the filing.

The Commission now directs the Petitioner to prepare and submit the audited accounts from the FY 2014-15 onwards based on commercial principles along with the True-up Petitions by 30th November 2018.

The True-up would therefore be taken up only after submission of the audited accounts. Accordingly, the Commission has decided not to consider True-up for the FY 2014-15, FY 2015-16 and FY 2016-17 in the current Order.

5. Chapter 5: Annual Performance Review of FY 2017-18

5.1. Background

The Tariff Order for the FY 2017-18 was issued by the Commission on 23rd May, 2017 approving the Aggregate Revenue Requirement (ARR) and tariff for the FY 2017-18. The Annual Performance Review for the FY 2017-18 is to be carried out in accordance with the Regulation 8 of the JERC for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) Regulations, 2014:

“(1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenue approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called ‘Review’.

.....(3) The revenue gap/surplus, if any, of the ensuing year shall be adjusted as a result of review and truing up exercises.

(4) While approving such expenses/revenue to be adjusted in the future years as arising out of the Review and/or Truing-up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenue. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

(5) For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is due to conditions beyond its control.

(6) In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such additional supply of power.”

5.2. Approach for the Review for the FY 2017-18

Petitioner’s submission:

The Petitioner has submitted the APR of FY 2017-18 based on the actual performance during the H1 (April-September 2017) of the year and the revised estimates for H2 (October 2017-March 2018) of the year. The projections for H2 of FY 2017-18 are arrived at by expected escalation over performance of H1.

Commission’s analysis:

The Commission for the purpose of estimating the energy demand of the State sought the information of historical sales, number of consumers and connected load of the previous 5 years till FY 2017-18 (till December 2017) from the Petitioner. The Petitioner was also asked to provide

month on month information for the last 3 years from FY 2014-15 to FY 2016-17. Various anomalies and gaps are observed in the data provided, which are listed as follows:

- Data on Energy Sales, Number of Consumers and Connected Load for FY 2015-16 was not submitted.
- Overall Energy Sales were reducing by almost 26% in March 2017 vis-à-vis February 2017.
- Energy sales for Domestic category were submitted as 0.49 MU in March 2017 vis-à-vis average of ~65 MU in earlier months.
- Energy Sales submitted for FY 2014-15 were observed to be higher than FY 2016-17 by almost ~400 MU.

From the various discrepancies as shown above, it is evident that the base data for projecting the energy sales for FY 2017-18 is not reliable.

In the Technical Validation Session (TVS) held at the Commission's office, the Petitioner was asked to submit justifications for these discrepancies. The Petitioner submitted that there were issues related to billing of energy to consumers for a few months in H2 of FY 2015-16 due to changeover of the billing agencies and the transition period thereof. The primary problem was non-billing in certain months of FY 2015-16 and adjustment of the same in FY 2016-17 resulting in lower billing than what should have been in FY 2015-16 and higher billing in FY 2016-17. The Petitioner further submitted that the meter reading and billing was maintained by different agencies separately in each division, and each agency had its separate logic for bill calculation and bill generation. However, now a common agency has taken over all the billing and collection data for HT and LT consumers and a common process is followed for all the divisions to avoid ambiguity in the process and data. While the process is streamlined, a lot of errors in the legacy data have been discovered and the error rectification process is going on.

The Petitioner was asked to provide the segregated quantum of month on month sales, however, the Petitioner expressed its inability to provide this segregated information at this stage as the information is present in the form of software dump and the analysis and segregation of the information will take considerable time.

The Commission is of the view that due to this distortion observed in energy sales, it is not possible to project the energy sales for FY 2017-18 as no definite trends can be observed. It is not prudent to approve the revised power purchase requirement and revenue from retail sale on the basis of the unreliable information presently available. Therefore, the Commission shall consider the actual performance at the time of the True-up of the FY 2017-18 once the audited accounts are submitted by the Petitioner.

Accordingly, the Commission has decided not to consider the Annual Performance Review of the FY 2017-18.

Chapter 6: Determination of Aggregate Revenue Requirement for the FY 2018-19

6.1 Background

The ARR for FY 2018-19 was approved in the MYT Order issued for the 1st Control Period (FY 2016-17 to FY 2018-19). In this Chapter the Commission determines the Aggregate Revenue Requirement (ARR) for the FY 2018-19 based on the actual information available for the previous years and the various norms defined in the MYT Order. The determination of Aggregate Revenue Requirement for the FY 2018-19 is to be carried out as per the following provisions of Regulation 6 of the JERC for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) Regulations, 2014:

“6. ARR Forecast

6.1 *The applicant shall, based on the Business Plan as approved by the Commission by Order, submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period by a Petition in accordance with the JERC (Terms & Condition for determination of Tariff) Regulations, 2009 by 30th November of the year prior to the commencement of the Control Period and accompanied by such fee payable, as specified in the JERC (Conduct of Business) Regulations, 2009.*

6.2 *The forecast of Aggregate Revenue Requirement shall be developed using the assumptions relating to the behaviour of individual variables that comprise the Aggregate Revenue Requirement during the Control Period.*

6.3 *The forecast of expected revenue from tariff and charges shall be developed based on the following:*

- (a) Estimates of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution System Users for each financial year within the Control Period; and*
- (b) Prevailing tariff as at the date of making the application.”*

6.2. Approach for determination of ARR for the FY 2018-19

The Petitioner has submitted the same ARR for the FY 2018-19 as approved in the MYT Order dated 18th April, 2016 along with an additional provision of Interest on Security Deposit. The Petitioner has computed revenue from the sale of power on the basis of the Retail Tariff approved by the Commission in the Tariff Order for FY 2017-18. As the Commission is not undertaking any review for the FY 2017-18 for the reasons detailed in the previous chapter, the Commission is retaining the projections and consequently costs for the FY 2018-19 at the same level as approved in the MYT Order dated 18th April, 2016 excluding the power purchase cost.

The Commission believes that the projections of Power Purchase Quantum and Cost approved in the MYT Order were based on historical trends and figures. Since the majority of the power procured by the Petitioner is from Central Generating Stations, it is prudent to revise the Power Purchase Cost based on the latest Tariff Orders issued by the Central Electricity Regulatory Commission (CERC) for the Control Period FY 2014-15 to FY 2018-19. Accordingly, the Commission has determined the revised Power Purchase Cost based on the same energy sales and Intra-State T&D loss as approved in the MYT Order for FY 2018-19. Resultantly, the Commission has also determined the Renewable Purchase Obligation (RPO) and the Interest on Working Capital which are dependent on the Power Purchase Cost. The Commission has determined the revenue from sale of power based on the approved energy sales, number of consumers and connected load in the MYT Order for FY 2018-19 to calculate the revenue gap for the year.

6.3. Projection of Number of consumers, Connected Load and Energy Sales Petitioner's Submission

The Petitioner has considered the same number of consumers, connected load and energy sales as approved in the MYT Order.

Commission's Analysis

The Commission for the reasons as discussed above approves the same number of consumers, connected load and energy sales as approved in the MYT Order.

Table 33: No. of Consumer, Connected Load and Energy Sales approved by Commission

Description	No. of Consumers	Connected Load (kW/kVA)	Energy Sales (MU)
LTD/Domestic	496725	1429336	984.51
LT-LIG/Low Income Group	3049	338	1.10
Low Tension-DM/LT-DM	4399	13044	14.84
LTC/Commercial	92869	282941	325.42
LTI/Industrial	6466	115580	137.42
LT Mixed/LT-P Hotel Industries	233	4285	5.31
Low Tension-AG/LT-AGP (Pump Sets/Irrigation)	10821	34481	23.86
LT Temporary	2581	1098	22.08
HTD Domestic	2	193	0.28
HTC Commercial	117	42567	79.05
HTI Industrial	651	417220	1398.09
High Tension-Ferro/SM/PI/SR	37	114756	582.70
High Tension-AG/HT-AGP (Pump Sets/Irrigation)	41	8378	6.08
Military Engineering Services/defense Establishments	12	7080	26.89
Public Lighting	2740	9598	36.95
Hoardings/Signboards	104	35	0.35
Total	620848	2480929	3644.93

The Commission approves Number of consumers as 620847, Connected Load as 2480929 kW/kVA and Energy Sales as 3644.93 MU in the ARR of FY 2018-19

6.4. Energy savings under Domestic Efficiency Lamp Programme (DELP)

Petitioner's Submission

The Petitioner has considered the same energy savings under DELP as approved by the Commission in the MYT Order.

Commission's analysis

The Commission in the ARR of FY 2018-19 considers the same energy savings as approved in the MYT Order.

Table 34: Energy Savings under DELP (MU)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Energy savings under DELP	78.60	78.60	78.60

The Commission approves Energy Savings of 78.60 MU in the ARR of FY 2018-19.

6.5. Inter-State Transmission Loss

Petitioner's Submission

The Petitioner has considered the same Inter-State Transmission Loss as approved in the MYT Order.

Commission's analysis

The Commission in the ARR of FY 2018-19 considers the Inter-State Transmission loss levels same as approved in the MYT Order.

Table 35: Inter-State Transmission Loss (%)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	For Stations in Western Region (WRPC)	3.66%	3.66%	3.66%
2	For Stations in Southern Region (SRPC)	7.50%	7.50%	7.50%

The Commission approves Inter-State Transmission Loss of 3.66% for power received from stations of Western Region and 7.50% for power received from stations of Southern Region in the ARR of FY 2018-19.

6.6. Intra-State Transmission and Distribution (T&D) loss**Petitioner's Submission**

The Petitioner has considered the same Intra-State T&D Loss as approved in the MYT Order.

Commission's analysis

The Commission approves the Intra-State T&D loss at the same level as approved in the MYT Order.

The following table provides the Intra-State T&D loss approved in the MYT Order, the Petitioners submission and T&D Loss now approved by the Commission.

Table 36: Intra-State T&D loss (%)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Intra-State distribution loss	10.75%	10.75%	10.75%

The Commission approves Intra-State T&D loss of 10.75% in the ARR of FY 2018-19.

6.7. Power Purchase Quantum & Cost**Petitioner's Submission**

The Petitioner has considered the same power purchase cost as approved by the Commission in the MYT Order for FY 2018-19.

Commission's Analysis

The Commission has projected the power purchase quantum and cost for FY 2018-19 based on the actual monthly power purchase data for 9 months of FY 2017-18 and 12 months data for FY 2016-17, FY 2015-16 and FY 2014-15, as submitted by the Petitioner. For projecting availability of power, firm allocation from various generating stations has been considered. The source wise methodology followed for projecting the quantum and cost of power procurement has been detailed below:

6.7.1. Availability of power**Availability of energy from NTPC and NPCIL stations:**

- The energy availability from all the NTPC and NPCIL stations have been done based on average Plant Load Factor (PLF) of the respective stations in the last 4-5 years depending on the status of operation of the plant during the year.
- The energy availability from Kawas Gas Power Plant (KGPP) and Jhanor-Gandhar Power Plant (JGPP) has been estimated based on the average PLF of the plant during first 9 months of FY 2017-18.
- No energy has been projected from Kakrapar Atomic Power Station (KAPS) as no energy has been scheduled from April-December 2017 as the plant is shutdown for maintenance.

Availability of energy from Co-Generation Plants:

- The energy availability from all the Co-Generation plants namely Vedanta Plant-1, Vedanta Plant-2 and Goa Sponge Pvt. Ltd. has been considered the same as in FY 2016-17 based on the provisional data submitted by the Petitioner.

Availability of energy from Renewable Energy Stations:

- The energy availability from Renewable Energy Plants namely NVVNL Hydro, SECI, and NVVNL Solar have been estimated based on the average PLF achieved by the plants in the first 9 months of FY 2017-18.

Availability from Ratnagiri Gas Power Plant (RGPPL):

- The State of Maharashtra (which has 95% share allocation from RGPPL) is not scheduling power because of non-availability of natural gas and hence non-availability of technical minimum schedule to run the plant. For the period from April-December 2017, no power was purchased. Therefore, the Commission has not considered any availability of power from this station.

Availability of energy from New Stations

- It is expected that the Kameng Hydro Electric Plant (HEP) of NEEPCO will achieve COD by the starting of FY 2018-19. Accordingly, the Commission has considered the energy availability from this station based on parameters notified in the CERC Tariff Regulations, 2014.

Availability of energy from Open Market/Unscheduled Interchange

- The energy deficit/surplus for the FY 2018-19, as discussed in the section on energy balance later in the Order, has been assumed to be purchased/sold in the open market.
- No power has been projected under UI Under-drawal/Over-drawal.

6.7.2. Power Purchase Cost**Variable Charges:**

- The per unit variable costs have been computed by taking the average of the actual per unit variable cost during the months of October-December 2017 for all the stations.

- For procurement of power from the Open Market, the Average Round the Clock (RTC) rate for the Western Region during the calendar year 2017 has been considered.

Fixed Charges:

- The fixed costs for CGS have been considered based on the Tariff Orders issued by the CERC for the respective Central Generating Stations.
- For Cogeneration and Renewable Energy Stations, the tariff has been considered as per the PPA's and Tariff Orders of respective stations.
- The fixed cost has been apportioned on the basis of the Petitioner's share in each station and the average annual plant availability factor achieved during the last five years by the plant.
- For new stations, since no source specifying the tariff is available in the public domain, the Commission has considered an average rate of Rs 5.00/kwh.

Other Charges:

No other charges have been considered for the FY 2018-19.

6.7.3. Transmission Charges

The Commission has projected the transmission charges payable to PGCIL based on the total capacity of the transmission network allocated to the Petitioner.

The transmission charges are determined based on the latest quarterly Point of Connection (PoC) rates approved by the Central Electricity Regulatory Commission (CERC) in accordance with Regulation 17(2) of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010.

6.7.4. Total Power Purchase Quantum and Cost

The following table provides the Power Purchase Quantum and cost approved by the Commission for FY 2018-19:

Table 37: Power Purchase Quantum (MU) and cost (Rs Cr) approved by Commission

Details of the stations	Power Purchase at Generator Periphery (MU)	Power Purchase at UT periphery (after adjusting ISTS Losses) (MU)	Fixed Charges (Rs Cr)	Variable Charges (Rs Cr)	Total (Rs Cr)	Avg. Rate (@ State Periphery) (Rs/kwh)
1	2	3	4	5	6	7
NTPC						
KSTPS	1579.30	1521.49	101.50	183.72	285.22	1.87
VSTPS - I	257.32	247.90	21.90	38.25	60.15	2.43
VSTPS - II	95.62	92.12	6.83	13.31	20.15	2.19
VSTPS - III	81.96	78.96	8.84	11.41	20.25	2.56
VSTPS - IV	95.62	92.12	15.47	13.35	28.82	3.13
VSTPS - V	45.08	43.43	7.70	6.33	14.03	3.23
KGPP	46.71	45.00	7.68	15.21	22.89	5.09
GGPP	60.92	58.69	9.74	20.90	30.63	5.22
SIPAT - I	177.86	171.35	23.35	20.69	44.04	2.57
KSTPS - III	46.40	44.70	6.11	5.31	11.42	2.55

1	2	3	4	5	6	7
RSTPS	724.88	670.51	50.53	172.30	222.84	3.32
SIPAT- II	83.51	80.46	10.38	9.97	20.34	2.53
Mouda II	44.72	43.08	14.46	11.00	25.46	5.91
Mouda	34.85	33.57	18.48	8.78	27.26	8.12
Solapur	81.49	78.50	17.47	23.51	40.98	5.22
Sub Total – NTPC	3456.23	3301.90	320.43	554.05	874.48	2.65
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00
NPCIL						
KAPS	0.00	0.00	-	0.00	0.00	0.00
TAPS	87.33	84.14	-	25.59	25.59	3.04
Sub Total NPCIL	87.33	84.14	-	25.59	25.59	3.04
Within State Generations						
Vedanta Plant-1- Co-Gen	96.28	96.28	-	23.11	23.11	2.40
Vedanta Plant-2- Co-Gen	75.21	75.21	-	18.05	18.05	2.40
Goa Sponge and Private Limited	5.82	5.82	-	1.40	1.40	2.40
Sub Total – Within State Generation	177.31	177.31	-	42.55	42.55	2.40
RPO						
NVVNL Solar	10.98	10.57	-	8.45	8.45	7.99
SECI Solar	49.52	47.71	-	26.24	26.24	5.50
Solar-REC	-	-	-	11.46	11.46	-
Non Solar-REC	-	-	-	28.89	28.89	-
Sub Total – RPO	60.49	58.28	-	75.04	75.04	-
NVVNL Hydro (Non Solar)	89.24	85.97	-	38.60	38.60	4.49
New Station- Kameng HEP-NEEPCO	20.25	19.51	-	9.76	9.76	5.00
Total Power from firm sources	3890.85	3727.11	320.43	745.58	1066.01	2.86
Traders						
Open Market	268.78	268.78	-	79.83	79.83	2.97
Sub Total – Open Market	268.78	268.78	-	79.83	79.83	2.97
Total	4159.64	3995.89	320.43	825.41	1145.84	2.87
Transmission Charges						
PGCIL Charges					183.84	
Total	4159.64	3995.89	320.43	825.41	1329.68	3.33

The Commission approves the quantum of power purchase for the FY 2018-19 as 3995.89 MU at the State Periphery with a total cost of Rs 1329.68 Cr.

6.8. Renewable Purchase Obligation (RPO)

Petitioner's Submission

The Petitioner has considered the same cost towards RPO, as approved by the Commission, in the MYT Order.

Commission's analysis:

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

The Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August 2016 and approved the revised RPO targets, as per which the Petitioner has to purchase 9.00% of its total consumption (including 3.60% from Solar) from renewable sources for the FY 2018-19. Further, the Regulation states that the obligation has to be calculated on the mix of consumption excluding power from hydropower sources. Accordingly, the Commission has determined the RPO on revised energy sales as shown in the table below.

The Petitioner is procuring physical power from solar and hydro plants. However, the physical power is not enough to fulfill the standalone RPO for FY 2018-19. Therefore, the Commission has considered the remaining RPO to be fulfilled by the purchase of Renewable Energy Certificate (REC). The Commission has assumed the rate of purchase for both solar and non-solar REC as Rs 1.50/ kWh (IEX Average Clearing Price Rate) due to non –availability of solar REC's in the market. The total cost towards RPO compliance has been considered in the total power purchase cost approved earlier.

In accordance with the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010 the Commission has determined the following Renewable Purchase Obligation for the Petitioner for FY 2018-19:

Table 38: Summary of Renewable Purchase Obligation (RPO) (MU)

Description	FY 2018-19
Sales within State (MU)	3644.93
Percentage of hydropower (NVVNL Hydro) in total power purchase quantum at Ex-bus	2.15%
Resultant Energy Sales for calculation of RPO (after adjustment of power from hydro sources) (MU)	3566.73
RPO obligation (in %)	9.00%
Solar	3.60%
Non-Solar	5.40%
RPO obligation for the year (in MU)	321.01
Solar	128.40
Non-Solar	192.60
RPO compliance (Physical Power available at Consumer Periphery after adjusting Inter-State Transmission of 3.66% and Intra-State T&D Loss of 10.75%)	52.01

Solar	52.01
Non-Solar	0.00
RPO compliance (REC certificates to be purchased)	268.99
Solar	76.39
Non-Solar	192.60

The cost towards compliance of RPO computed by the Commission has been shown in the following table.

Table 39: Cost towards compliance of Renewable Purchase Obligation (RPO) (In Rs Cr)

Description	RPO (MU)	Total Cost (Rs Cr)	Avg. Rate (Rs/kWh)
NVVNL Solar	9.44	8.45	8.95
SECI Solar	42.58	26.24	6.16
Solar-REC	76.39	11.46	1.50
Non Solar- REC	192.60	28.89	1.50
Total RPO	321.01	75.04	2.34

The cost towards RPO has already been considered in the total power purchase cost approved by the Commission in the previous section.

6.9. Energy Balance

Commission's analysis

Based on the approved energy sales and the revised estimates of the Power purchase quantum, the Commission approves the energy balance as shown in the following table:

Table 40: Energy Balance (MU) approved by Commission

	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
A	Energy Requirement			
1	Energy sales within the State/UT	3644.93	3644.93	3644.93
2	Open Access Sales	0.00	0.00	0.00
3	Less: Energy Savings	78.60	78.60	78.60
4	Total Sales within the State/UT			3566.33
5	Distribution losses			
	%	10.75%	10.75%	10.75%
	MU	429.56	429.56	429.56
6	Energy required at State Periphery	3995.89	3995.89	3995.89
B	Energy Transactions at Periphery			
1	Add: Sales in Unscheduled Interchange	0.00	0.00	0.00
2	Add: Sales in Power Exchanges	0.00	0.00	0.00
3	Less: Purchase under UI (MU)	0.00	0.00	0.00
4	Less: Open Access Purchase (MU)	0.00	0.00	0.00
5	Total energy scheduled at State Periphery (MU)	3995.89	3995.89	3995.89
6	Energy Available at State Periphery from firm sources	3995.89	3995.89	3727.11
7	Deficit/(Surplus) (5-6)	0.00	0.00	268.78

The Commission approves an energy deficit of 268.78 MU in FY 2018-19. The Commission directs the Petitioner to purchase this deficit power from open market or other cheaper sources rather than from costlier power stations. The Commission has considered the cost towards this shortfall along with the Power Purchase Cost as approved earlier.

6.10. Operation & Maintenance (O&M) Expenses

Petitioner's Submission

The Petitioner has considered the same O&M Expenses as approved in the MYT Order.

Commission's analysis

The following table provides the O&M expenses approved in the MYT Order, Petitioner's submission and now approved by the Commission.

Table 41: O&M Expenses approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	270.41	270.41	270.41
2	Administrative & General Expenses (A&G)	10.81	10.81	10.81
3	Repair & Maintenance Expenses	45.60	45.60	45.60
	Total Operation & Maintenance Expenses	326.82	326.82	326.82

The Commission approves the Operation & Maintenance (O&M) expenses of Rs 326.82 Cr in the ARR of FY 2018-19.

6.11. Capitalisation

Petitioner's Submission

The Petitioner has considered the same Capitalization as approved in the MYT Order.

Commission's analysis:

The Commission approves the same Capitalization as approved in the MYT Order.

Table 42: Capitalisation approved by the Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Capitalisation	685.27	685.27	685.27

The Commission approves Capitalization of Rs 685.27 Cr in the ARR of FY 2018-19.

6.12. Depreciation

Petitioner's Submission

The Petitioner has considered the same depreciation as approved in the MYT Order.

Commission's analysis:

The Commission approves the same depreciation as approved in the MYT Order.

Table 43: Depreciation approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Gross Fixed Assets	1454.96	1454.96	1454.96
2	Addition During the FY	685.27	685.27	685.27
3	Less: Capitalization through grants in Business Plan Order	125.77	125.77	125.77
4	Closing Gross Fixed Assets	2014.46	2014.46	2014.46
5	Average Gross Fixed Assets	1734.71	1734.71	1734.71
6	Weighted Average Depreciation rate (%)	5.28%	5.28%	5.28%
	Depreciation	91.59	91.59	91.59

The Commission approves depreciation of Rs 91.59 Cr in the ARR of FY 2018-19.

6.13. Interest and Finance Charges

Petitioner's Submission

The Petitioner has considered the same Interest and Finance Charges as approved in the MYT Order.

Commission's analysis:

The Commission also approves the same Interest and Finance Charges as approved in the MYT Order.

Table 44: Interest and Finance Charges approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	773.99	773.99	773.99
2	Add: Normative Loan during the year	391.65	391.65	391.65
3	Less: Normative Repayment equivalent to Depreciation	91.59	91.59	91.59
4	Closing Normative Loan	1074.05	1074.05	1074.05
5	Average Normative Loan	924.02	924.02	924.02
6	Rate of Interest (%)	11.60%	11.60%	11.60%
	Interest and Finance Charges	107.19	107.19	107.19

The Commission approves Interest and Finance Charges as Rs 107.19 Cr in the ARR of FY 2018-19.

6.14. Return on Equity (RoE)

Petitioner's submission

The Petitioner has considered the same RoE as approved in the MYT Order.

Commission's analysis:

The Commission, similar to above, approves the same RoE as approved in the MYT Order.

Table 45: RoE approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	436.49	436.49	436.49
2	Additions on account of new Capitalization	167.85	167.85	167.85
3	Closing Equity	604.34	604.34	604.34
4	Average Equity	520.41	520.41	520.41
5	Rate of Return on Equity (%)	16.00%	16.00%	16.00%
	Return on Equity	83.27	83.27	83.27

The Commission approves Return on Equity of Rs 83.27 Cr in the ARR of FY 2018-19.

6.15. Interest on Security Deposits

Petitioner's submission:

The Petitioner has considered the same Interest of Security Deposit as approved in the MYT Order. Further, the Petitioner has requested the Commission to allow the provision of unpaid security deposit of Rs 9.15 Cr to be included in the total revenue gap to be recovered in the FY 2018-19.

Commission's analysis:

The Commission has considered the same Interest on Security Deposit as approved in the MYT Order. The Commission has not considered any provision for unpaid Interest on the Consumer Security Deposit. The Commission will consider the interest paid on consumer security deposits for the previous years as and when the same is paid to consumers on actual basis as per the audited accounts.

Table 46: Interest on Security Deposits approved by Commission (In Rs Cr)

S. No	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Opening Security Deposit	90.57	90.57	90.57
2	Add: Deposits During the year	1.16	1.16	1.16
3	Less: Deposits refunded	0.00	0.00	0.00
4	Closing Security Deposit	91.73	91.73	91.73
5	Average Security Deposit	91.15	91.15	91.15
6	Rate of Interest (%)	7.75%	7.75%	7.75%
7	Interest on Security Deposit	7.02	7.02	7.02
8	Additional provision of unpaid security deposit	-	9.15	-
	Total Interest on Security Deposit	7.02	16.17	7.02

The Commission approves Interest on Security Deposit as Rs 7.02 Cr in the ARR of FY 2018-19.

6.16. Demand Side Management (DSM) Expenses

Petitioner's submission

The Petitioner has considered the expenses towards DSM as approved in the MYT Order.

Commission's analysis:

The Commission approves the same DSM expenses as approved in the MYT Order.

Table 47: DSM Expenses as approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	DSM Expenses	3.03	3.03	3.03

The Commission approves DSM Expenses as Rs 3.03 Cr in the ARR of FY 2018-19.

6.17. Interest on Working Capital**Petitioner's Submission**

The Petitioner has considered the same Interest on Working Capital as approved in the MYT Order.

Commission's analysis:

Since the Power purchase cost has been revised, the same has an impact on the Interest and Working Capital. The Interest on Working Capital has been calculated based on the normative principles outlined in the JERC (Multi-Year Distribution Tariff) Regulations, 2014. Regulation 25 of the MYT Regulations, 2014 states the following:

Working capital for retail supply activity of the licensee shall consist of:

- (i) *Receivables of two months of billing*
- (ii) *Less power purchase cost of one month*
- (iii) *Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt*
- (iv) *Inventory for two months based on annual requirement for previous year.*

The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan worked out on the normative figures."

The Commission has determined the Interest on Working Capital in accordance with the Regulation as cited above. The Interest Rate has been considered as the prevailing SBI Base rate. The table below provides the Interest in Working Capital as approved in the MYT Order and now approved by the Commission:

Table 48: Interest on Working Capital approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Receivables of two months of billing	342.94	342.94	325.42
2	Less: Power Purchase Cost for one month	119.42	119.42	110.81
3	Inventory Based on Annual Requirement for Previous FY for 2 months	0.00	0.00	0.00
4	Total Working Capital Requirement	223.52	223.52	214.62
5	Less: Average Security Deposit excluding BG/FDR	90.57	90.57	91.15
6	Net Working Capital	132.94	132.94	123.47
7	Rate of Interest (%)	9.30%	9.30%	8.65%
	Interest on Working Capital	12.36	12.36	10.68

The Commission now approves the Interest on Working Capital as Rs 10.68 Cr in the ARR of FY 2018-19.

6.18. Non-Tariff Income (NTI)

Petitioner's submission

The Petitioner has considered the same NTI as approved in the MYT Order.

Commission's analysis:

The Commission also approves the same NTI as approved in the MYT Order.

Table 49: Non –tariff Income approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Non-Tariff Income	6.74	6.74	6.74

The Commission approves Non-Tariff Income of Rs 6.74 Cr in the ARR of FY 2018-19.

6.19. Aggregate Revenue Requirement (ARR)

Petitioner's submission

The Petitioner has considered the same ARR for FY 2018-19 as approved in the MYT Order along with an additional provision of Interest on Security Deposit.

Commission's analysis

On the basis of the above, the Commission approves the revenue requirement for the FY 2018-19 as shown in the table below:

Table 50: Aggregate Revenue Requirement approved by Commission for FY 2018-19 (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Power Purchase Cost (inclusive of RPO Cost)	1433.09	1433.09	1329.68
2	Operation & Maintenance Expenses	326.82	326.82	326.82
3	Depreciation	91.59	91.59	91.59
4	Interest and Finance charges	107.19	107.19	107.19
5	Interest on Working Capital	12.36	12.36	10.68
6	Interest on Security Deposit	7.02	16.17	7.02
7	Return on Equity	83.27	83.27	83.27
8	Provision for Bad Debt	0.00	0.00	0.00
9	Income Tax	0.00	0.00	0.00
10	Payment towards DSM	3.03	3.03	3.03
11	Total Revenue Requirement	2064.37	2073.52	1959.28
12	Less: Non-Tariff Income	6.74	6.74	6.74
13	Net Revenue Requirement	2057.63	2066.78	1952.54

The Commission approves net ARR of Rs 1952.54 Cr for the FY 2018-19.

6.20. Revenue at existing Retail Tariff

Petitioner's submission

The Petitioner has submitted the revenue from sale of power at existing tariff as Rs 1593.75 Cr based on the approved energy sales, connected load and number of consumers in the MYT

Order. The revenue for FY 2018-19 has been computed based on the retail tariff notified by the Commission in the Tariff Order for the FY 2017-18 dated 23rd May 2017. The table below provides the category wise revenue computed by the Petitioner for FY 2018-19.

Table 51: Revenue submitted by Petitioner (In Rs Cr)

S. No.	Category	Sales (MU)	Fixed Charges (Rs Cr)	Energy Charges (Rs Cr)	Total Charges (Rs Cr)	ABR (Rs /kWh)
1	2	3	4	5	6	7
A	Low Tension Supply					
1	Tariff LTD/Domestic and Non-Commercial	984.51	16.49	272.07	288.56	2.93
1(a)	0-100 units	89.28	5.09	11.61	16.69	1.87
1(b)	101-200 units	205.24	3.18	38.99	42.18	2.06
1(c)	201 to 300 units	174.49	3.65	41.88	45.53	2.61
1(d)	301 to 400 units	119.79	1.78	37.14	38.91	3.25
1(e)	Above 400 units	395.72	2.79	142.46	145.25	3.67
2	Tariff LTD/Low Income Group	1.10	0.11	-	0.11	1.00
3	Tariff-LTC/Commercial	340.26	5.84	126.41	132.24	3.89
	<u>0-20 KW/Commercial Consumers</u>	268.67	5.72	99.66	105.38	3.92
	1-100 Units	114.26	2.94	37.13	40.07	3.51
	101-200 units	99.42	2.67	38.77	41.45	4.17
	201-400 Units	52.41	0.11	22.53	22.65	4.32
	Above 400 units	2.59	0.00	1.22	1.22	4.71
	> 20-90Kw Commercial Consumers	71.59	0.11	26.75	26.86	3.75
	1-100 Units	28.04	0.05	9.11	9.17	3.27
	101-200 units	28.04	0.05	10.94	10.99	3.92
	201-400 Units	14.78	0.00	6.36	6.36	4.30
	Above 400 units	0.73	0.00	0.34	0.34	4.70
4	LTI-Industry	137.42	4.16	47.81	51.97	3.78
	0-500 Units	7.21	0.22	2.24	2.45	3.40
	Above 500 units	130.21	3.94	45.57	49.52	3.80
5	Tariff-LTP/Mixed (Hotel Industries)	5.31	0.15	2.39	2.54	4.79
6	LT-Agriculture	23.86	0.56	3.13	3.69	1.54
7	Tariff-LTAG/Agriculture (Pump Sets/Irrigation) (A)	23.03	0.40	2.99	3.40	1.48
8	Tariff-LTAG/Agriculture Allied (B)	0.83	0.16	0.13	0.29	3.48
9	Tariff-LTPL/Public Lighting	36.95	0.46	14.41	14.87	4.02
10	Tariff-LT Hoarding and Signboards	0.35	0.00	0.35	0.35	9.97
B	High Tension Supply					
11	Tariff HTD/Domestic	0.28	0.03	0.12	0.16	5.64
12	Tariff HT-Commercial	79.05	12.77	43.48	56.25	7.12
13	Tariff HTI/Industrial	1398.09	125.17	599.70	724.87	5.18
	Connected at 11/33 kV	1250.34	103.90	537.64	641.55	5.13
	Connected at 110 kV	147.75	21.27	62.06	83.32	5.64

1	2	3	4	5	6	7
14	H.T.Industrial (Ferro Metallurgical/Steel Melting/Power Intensive)	582.70	34.43	250.56	284.99	4.89
15	HT-Agriculture	6.08	0.37	0.98	1.34	2.21
	Tariff-HTAG/Agriculture (Pump Sets/Irrigation) (A)	2.95	0.32	0.41	0.73	2.48
	Tariff-HTAG/Agriculture (Allied Activities) (B)	3.13	0.05	0.56	0.61	1.96
16	H.T. MES/Defence Establishments	26.89	1.49	13.45	14.93	5.55
C	Temporary Supply				-	
17	Tariff-LT/Temporary Domestic	17.47	0.06	12.23	12.29	7.03
18	Tariff-LT/Temporary Commercial	4.61	0.03	4.57	4.60	
19	Tariff-HTTS/Temporary Supply		-	-	-	
D	Single Point Supply				-	
20	Residential Complexes		-	-	-	
21	Commercial Complexes		-	-	-	
22	Industrial Complexes		-	-	-	
	Total	3644.93	202.11	1391.64	1593.75	4.37

Commission's analysis

The category wise/sub-category wise and slab wise revenue at retail tariff is determined as per the applicable tariff rates. The revenue from demand charges and the energy charges have been projected for each category/sub-category and slab. The revenue from LT-AG-Allied Activities, HT-AG-Allied activities, HT Temporary and Single Point Supply categories has not been computed due to non-availability of data on energy sales, connected load and number of consumers for these categories. The category/sub-category/slab wise revenue as computed by the Commission for FY 2018-19 has been shown in the following table:

Table 52: Revenue from existing retail tariff for FY 2018-19 (In Rs Cr)

S. No.	Category	Sales (Mus)	Demand Charges (Rs Cr)	Energy charges (Rs Cr)	Total Charges (Rs Cr)	ABR (Rs/unit)
1	2	3	4	5	6	7
1	DOMESTIC	1000.73	15.53	228.58	244.11	2.44
(i)	LT-D Domestic	999.35	15.38	228.46	243.84	2.44
	0-100 units	276.28	6.08	35.92	42.00	1.52
	101-200 units	251.76	3.05	47.83	50.88	2.02
	201-300 units	164.13	3.16	39.39	42.55	2.59
	301-400 units	105.43	1.43	32.68	34.11	3.24
	Above 400 units	201.75	1.67	72.63	74.30	3.68
(ii)	Low Income Group	1.10	0.11	-	0.11	1.00
(iii)	HT-D Domestic	0.28	0.03	0.12	0.16	5.64
2	COMMERCIAL	404.47	28.88	184.73	213.61	5.28
(i)	LT-C Commercial	325.42	16.11	141.25	157.36	4.84
	0-100 units	49.14	3.33	15.97	19.30	3.93
	101-200 units	31.05	0.81	12.11	12.92	4.16

1	2	3	4	5	6	7
	201-400 units	52.14	1.69	22.42	24.11	4.62
	Above 400 units	193.08	10.29	90.75	101.03	5.23
(ii)	HT-C Commercial	79.05	12.77	43.48	56.25	7.12
3	INDUSTRIAL	2123.52	124.01	899.10	1023.11	4.82
(i)	LT-I Industrial	137.42	4.16	47.30	51.46	3.74
	0-500 units	19.96	1.95	6.19	8.14	4.08
	Above 500 units	117.46	2.21	41.11	43.32	3.69
(ii)	Low Tension-Mixed/LT-P (Hotel Industries)	5.31	0.15	2.39	2.54	4.79
(iii)	High Tension-I/HT-I	1398.09	93.87	598.85	692.73	4.95
	Connected at 11/33 kV	1165.47	85.19	501.15	586.34	5.03
	Connected at 110 kV	232.62	8.69	97.70	106.39	4.57
(iv)	High Tension- Ferro/SM/PI/SR	582.70	25.82	250.56	276.38	4.74
4	AGRICULTURE	29.94	0.85	3.95	4.80	1.60
(i)	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)	23.86	0.50	3.10	3.60	1.51
(ii)	Low Tension-AG/LT-AGA (Allied Activities)	-	-	-	-	-
(iii)	High Tension-AG/HT-AGP (Pump Sets/Irrigation)	6.08	0.35	0.85	1.20	1.98
(iv)	High Tension-AG/HT-AG (Allied Activities)	-	-	-	-	-
5	MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS	26.89	1.49	13.45	14.93	5.55
6	PUBLIC LIGHTING	36.95	0.46	14.41	14.87	4.02
7	HOARDINGS/SIGNBOARDS	0.35	0.00	0.35	0.35	9.97
8	TEMPORARY	22.08	0.13	21.06	21.19	9.60
(i)	LT	22.08	0.13	21.06	21.19	9.60
	LT Domestic	2.74	0.01	1.92	1.93	7.03
	LT Commercial	19.34	0.12	19.14	19.26	9.96
(ii)	HT	-	-	-	-	-
	TOTAL	3644.93	171.34	1365.63	1536.97	4.22

The Commission has determined revenue from sale of power at existing tariff as Rs 1536.97 Cr for FY 2018-19.

6.21. Standalone Revenue Gap/Surplus

Petitioner's submission

Based on the ARR submitted and the revenue from retail tariff, a standalone revenue gap of Rs. 473.03 Cr has been determined by the Petitioner for FY 2018-19.

Commission analysis

Based on the approved ARR and existing retail tariff, the following Revenue Gap/Surplus is arrived at for the FY 2018-19:

Table 53: Standalone Revenue Gap/Surplus approved by Commission (In Rs Cr)

S. No.	Particulars	Approved in MYT Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	2057.63	2066.78	1952.54
2	Revenue from Retail Sales at Existing Tariff	-	1593.75	1536.97
	Net Gap /(Surplus)	-	473.03	415.57

The standalone gap at existing retail tariff is Rs 415.57 Cr for FY 2018-19. The estimated gap is considered while determining the retail tariff for FY 2018-19, as discussed in the subsequent Chapter.

7. Chapter 7: Tariff Principles and Design

7.1. Overall Approach

The Commission while designing retail tariffs for FY 2018-19 has kept in view the principles of determination of tariff set out in the Electricity Act, 2003 (EA, 2003), Tariff Policy, 2016 and the MYT Regulations, 2014.

The Commission in this Tariff Order, has tried to meet the objectives of the EA 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2003 also directs to maintain a healthy balance between the interests of the Utilities and the reasonableness of the cost of power being supplied to consumers. The Commission has also taken into consideration the Licensees submissions as well as the public responses in these proceedings.

The supply of electricity to all the people is an essential driver for development, and also influences social and economic change. Since, the majority of the energy sales within the Licensees jurisdiction is of industrial nature, the Commission has attempted to ensure that, while industries and commerce are promoted, it is not at the cost of other segments of society.

7.2. Applicable Regulations

Regulation 36 of the MYT Regulations, 2014 states the following:

“a. The Commission shall gradually move towards reduction of cross subsidy in accordance with Electricity Act, Tariff Policy and such other guidelines of the government as applicable.

b. The Distribution Licensee shall compute the consumer category-wise cost of supply as per the methodology elaborated below.

c. Allocation of Cost: The Cost to serve shall be allocated to the consumer categories in the following manner:

Step 1: Functional Demarcation of Cost – Total cost shall be divided on the basis of functions performed such as power purchase, distribution etc.

Step 2: Classification of Cost –Each of the functionalized costs shall be further classified, based on its intrinsic nature into Demand related cost, Energy related cost and Customer related cost. Demand related costs shall generally be of fixed nature, related to capacity creation and shall include interest on capital borrowing, depreciation etc. Energy cost shall be related to quantum of electricity consumption of consumer, such as fuel cost, interest on working capital, etc. Consumer related cost shall include operating expenses associated with meter reading, billing and accounting.

Step 3: Allocation of Cost

- (i) *Allocation of Demand Costs:* Demand costs of all three functions shall be allocated among consumer categories on the basis of average coincident peak demand of the tariff categories (average of past 12 months). To facilitate determination of average coincident peak demand for the various tariff categories, load research shall be made an integral part of the operations of the DISCOMs and systematic load research exercises shall be initiated.
- (ii) *Allocation of Energy Costs:* Energy related costs of Distribution functions shall be allocated to consumer categories on the basis of ratio of electricity consumption of each consumer category to the total electricity consumption under the purview of the Distribution Licensee. Energy related costs of Power purchase shall be allocated to various tariff categories on the basis of block approach on merit order dispatch and incremental principle, where each tariff category shall be allocated the incremental (energy related) power purchase cost on the basis of their respective share in the incremental power purchase. For the purpose of operationalizing the block approach and incremental principle, the Commission shall identify and notify a suitable year as the "base year".
- (iii) *Allocation of Customer Costs:* Customer related costs shall be allocated to consumer categories on the basis of the ratio of number of consumers in each category to total number of consumers under the purview of the Distribution Licensee.

d. Summation of allocated Demand cost, Energy cost and Customer cost across functions shall be total Cost to serve for respective consumer categories. Cost to serve reduced by revenue from a consumer category shall give total subsidy for that category. Total subsidy for a consumer category reduced by Government subsidy, if any, shall be cross-subsidy for that consumer category.

e. The consumers below poverty line who consume power below a specified level, say 30 units per month, shall receive a special support through cross subsidy.

f. Cross-subsidy surcharge and additional surcharge in Open Access

- (i) The amount received or to be received by the licensee on account of cross-subsidy surcharge and additional surcharge, as approved by the Commission from time to time in accordance with the Regulations specified by the Commission, shall be shown separately against the consumer category that is permitted open access as per the phasing plan.
- (ii) Cross-subsidy surcharge and additional surcharge shall be shown as revenue from the tariff from the consumer categories who have been permitted open access and such amount shall be utilized to meet the cross-subsidy requirements of subsidized categories and fixed costs of the Distribution Licensee arising out of his obligation to supply. Provided that the licensee shall provide such details in its annual filings.

g. Tariff Design

- (i) The Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.
- (ii) After the costs have been allocated based on the method specified in clauses I and (d) above, tariffs for different consumer categories shall be designed with due regard to factors provided under section 62(3) of the Act.
- (iii) The time of day tariff would be structured across three time slabs to denote normal, peak and off-peak periods. The time-periods would vary according to different seasons of the

year i.e. summer, winter and the monsoon season. The peak tariff would be 10%-20% higher than the normal tariff and the off-peak tariff would be priced 5%-10% lower than the normal tariff.

- (iv) Time of Day tariff may be introduced in a phased manner, wherein in phase 1 it would be for HT Consumers, in phase 2 – for LT consumers consuming more than 25 KW and in phase 3 for LT consumers consuming more than 10 KW.”

7.3. Revenue Gap/Surplus at existing tariff

Petitioner's Submission

The Petitioner has proposed a standalone revenue gap of Rs 473.03 in FY 2018-19. The Petitioner has submitted that the cumulative revenue gap from FY 2014-15 to FY 2017-18 is not being claimed, the same shall be submitted once the audited annual accounts are prepared for respective years. The standalone revenue gap as submitted by the Petitioner has been tabulated below:

Table 54: Standalone Revenue Gap/Surplus submitted by Petitioner (In Rs Cr)

Particulars	FY 2018-19
Net Revenue Requirement	2066.78
Revenue from Retail Sales at Existing Tariff inclusive of Regulatory Surcharge applicable in FY 2017-18	1593.75
Standalone Gap /(Surplus) for the year	473.03

Commission's analysis

The Commission in the True-up of FY 2013-14 approved the revenue gap/surplus as nil. Further, the Commission has not approved any revenue gap for FY 2014-15 to FY 2016-17 due to non-availability of audited annual accounts and for FY 2017-18 due to unreliable data. Therefore, the Commission approves the standalone revenue gap for FY 2018-19 as follows:

Table 55: Standalone Revenue Gap/ Surplus determined by Commission (In Rs Cr)

Particulars	FY 2018-19
Net Revenue Requirement	1952.54
Revenue from Retail Sales at Existing Tariff	1536.97
Standalone Gap /(Surplus) for the year	415.57

The Commission has computed a standalone revenue gap of Rs 415.57 Cr in the FY 2018-19 at the existing tariff.

7.4. Treatment of the Revenue Gap/ Surplus and Tariff Design

The revenue gap of Rs 415.57 Cr, signifies that the revenue from the existing tariff is not commensurate with the costs incurred by the Petitioner. Therefore, in order to fulfill this revenue deficit and to be financially sustainable, the retail consumer tariffs are required to be increased. The Commission has accordingly dealt with this gap in the following section.

7.4.1. Tariff Proposal

Petitioner's Submission

The Petitioner has proposed to recover the revenue gap of Rs 473.03 Cr, partly from proposed tariff increase and partly from budgetary support from the Govt. of Goa. The Petitioner has proposed an average tariff hike of 4.95% that will earn an additional revenue of Rs 78.94 Cr. The

remaining gap of Rs 394.09 Cr is proposed to be met from the budgetary support from the Government.

The category wise existing and proposed tariff submitted by the Petitioner is as under:

Table 56: Retail Tariff proposed by Petitioner

S. No.	Category	Existing Tariff		Proposed Tariff	
		Fixed Charges	Energy Charges (Paisa/kWh)	Fixed Charges	Energy Charges (Paisa/kWh)
1	2	3	4	5	6
1	Domestic				
A	Low Tension-D/LT-D				
	0-100 units	Single Phase Rs 20/Connection/Month Three Phase Rs 45/Connection/Month	130	Single Phase Rs 25/Connection/Month Three Phase Rs 80/Connection/Month	140
	101-200 units		190		200
	201 to 300 units		240		260
	301 to 400 units		310		330
	Above 400 units		360		380
B	Low Tension-LIG/LT-LIG	Rs 30/Connection/Month		Rs 40/Connection/Month	
C	High Tension-D/HT-D				
	All Units	Rs 150/kVA/Month	440	Rs 160/kVA/Month	460
2	Commercial				
A	Low Tension-C/LT-C				
	0-100 units	0-20 kW - Rs 50/Conn/Month Above 20kW-90 kW Rs 50/Conn/month + additional Rs 55/kW for every kW increase above 20 kW	325	0-20 kW - Rs 60/Conn/Month Above 20kW-90 kW Rs 90/Conn/month	330
	101-200 units		390		400
	201 units- 400 units		430		480
	Above 400 units		470		520
B	High Tension-C/HT-C				
	All Units	Rs 250/kVA/month	550	Rs 250/kVA/month	550
3	Industrial				
A	Low Tension-I/LT-I				
	0-500 units	Rs 30/HP/Month	310	Rs 35/HP/Month	330
	Above 500 units	Rs 30/HP/Month	350	Rs 35/HP/Month	380
B	Low Tension-Mixed/LT-P (Hotel Industries)				
	All Units	Rs 30/kW/Month	450	Rs 35/kW/Month	460
C	High Tension-I/HT-I				
	Connected at 11/33 kV	Rs 250/kVA/Month	430	Rs 250/kVA/Month	450
	Connected at 110 kV	Rs 250/kVA/Month	420	Rs 250/kVA/Month	450
D	High Tension-Ferro/SM/PI/SR				
	All Units	Rs 250/kVA/Month	430	Rs 250/kVA/Month	450

1	2	3	4	5	6
4	Agricultural				
A	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)				
	All Units	Rs 12/HP/Month	130	Rs 15/HP/Month	150
	Low Tension-AG/LT-AGA (Allied Activities)				
	All Units	Rs. 20/HP/Month	160	Rs. 20/HP/Month	180
C	High Tension-AG/HT-AGP (Pump Sets/Irrigation)				
	All Units	Rs. 35/kVA/Month	140	Rs. 35/kVA/Month	150
D	High Tension-AG/HT-AG (Allied Activities)				
	All Units	Rs. 50/kVA/Month	180	Rs. 60/kVA/Month	200
5	Military Engineering Services/Defense Establishments				
	All Units	Rs. 175/kVA/Month	500	Rs. 175/kVA/Month	500
6	Public Lighting				
	All Units	Rs. 40/kW/Month	390	Rs. 40/kW/Month	390
7	Hoardings/Signboards				
	All Units	Rs. 60/kVA/Month	990	Rs. 60/kVA/Month	990
8	Temporary Supply				
A	LT Temporary Domestic	Rs. 60 per kW per month or part thereof subject to a minimum of Rs. 300/- per connection per month or part thereof	700	Rs. 60 per kW per month or part thereof subject to a minimum of Rs. 300/- per connection per month or part thereof	720
B	LT Temporary Commercial	Rs. 100 per kVA per month or part thereof subject to a minimum of Rs. 500/- per connection per month or part thereof	990	Rs. 120 per kVA per month or part thereof subject to a minimum of Rs. 500/- per connection per month or part thereof	990
C	HT Temporary	Rs 120 per kVA per month or part thereof	990	Rs. 120 per kVA per month or part thereof	990
9	Single Point Supply				
A	Residential Complexes	Rs. 100 per kVA per month or part thereof	310	Rs. 100 per kVA per month or part thereof	330
B	Commercial Complexes	Rs. 200 per kVA per month or part thereof	430	Rs. 200 per kVA per month or part thereof	430
C	Industrial Complexes	Rs. 200 per kVA per month or part thereof	390	Rs. 200 per kVA per month or part thereof	410

Commission's analysis

As discussed above, the Commission has determined the retail tariff for the FY 2018-19 in accordance with the principles stated in the Electricity Act, 2003 Tariff Policy, 2016, and the MYT Regulations, 2014.

Tariff design in general is guided by the following principles:

1. Cost reflective: The tariffs determined should efficiently reflect the cost of supply for each consumer category.
2. Progressive tariffs: Ensuring progressivity among tariffs by having telescopic tariff slab within a consumer category which encourages efficient consumption and at the same time promotes intra-category cross-subsidy by way of charging higher tariff for higher consumption to subsidise the lower consumption consumers.
3. Revenue neutrality: There should be no impact on the utility's yearly revenue due to rationalization of tariffs i.e. the overall status quo should be maintained.
4. Revenue stability: Utilities should ensure adequate fixed cost recovery from fixed/demand charges.
5. Affordability: Assessing affordability of electricity for Domestic & Commercial consumers for defining slab ranges and setting tariffs.
6. Avoiding tariff shocks: Tariff shocks should be prevented and consumers should be kept informed about the future trends in tariffs.
7. Demand management and grid stability: Demand management and grid stability should be ensured with demand-based tariffs.
8. Simplified tariff structure: Tariff structure should be simplified to make it easily administrable by the utility and easy to understand for the consumer.
9. Smart tariff design: Tariff rate design should take into consideration trends in electric power such as small scale renewable generation by consumers, energy efficiency, electric vehicle charging, etc.

Keeping in view the above principles and the Petitioner's submission the Commission has determined and modified the Retail Tariff for FY 2018-19 as per the following:

1. The Commission in accordance with the Petitioner's submission has limited the average tariff hike with the remaining gap to be recovered from Govt's budgetary support as discussed in subsequent sections. A relatively higher tariff increase has been done for cross-subsidized categories such as Domestic and Agriculture than cross-subsidizing categories such as Commercial and Industrial category in order to ensure that tariffs progressively reflect the cost of supply.
2. The consumers under the Commercial category having connected load between 20-90 kW used to pay a monthly Demand charge based on both per connection basis as well as on connected load basis. The Commission in this Order has done away with the monthly fixed charge on per connection basis and approved a fixed charge only on the basis of connected load.

7.4.2. Tariff Increase and Schedule:

As described earlier, the current tariff is not covering the entire cost of the Petitioner for FY 2018-19 necessitating an increase in Retail Tariff. The existing retail tariff and tariff now approved by the Commission for each consumer category has been shown in the table below:

Table 57: Existing and approved tariff

1	Category	Existing Tariff		Approved Tariff	
		Fixed Charges	Energy Charges (Rs/kWh)	Fixed Charges	Energy Charges (Rs/kWh)
2	3	4	5	6	
1 Domestic					
A Low Tension-D/LT-D					
0-100 units	Single Phase Rs 20/Con/Month	1.30	Single Phase Rs 25/Con/Month	1.40	
101-200 units		1.90		2.10	
201 to 300 units		2.40		2.65	
301 to 400 units	Three Phase Rs 45/Con/Month	3.10	Three Phase Rs 60/Con/Month	3.45	
Above 400 units		3.60		4.00	
B Low Tension-LIG/LT-LIG	Rs 30/Con/Month		Rs 40/Con/Month		
C High Tension-D/HT-D					
All Units	Rs 150/kVA/Month	4.40	Rs 100/kVA/Month	3.45	
2 Commercial					
A Low Tension-C/LT-C					
0-100 units	0-20 kW - Rs 50/Con/Month	3.25	For consumers with Load upto – Rs 50/Con/Month	3.40	
101-200 units		3.90		4.10	
201 units- 400 units		4.30		4.60	
Above 400 units	Above 20kW-90 kW Rs 50/Con/Month + additional Rs 55/kW for every kW increase above 20 kW	4.70	For consumers with Load more than 20 kW and upto 90 kW- Rs 55/kW/Month	5.00	
B High Tension-C/HT-C					
All Units	Rs 250/kVA/month	5.50	Rs 250/kVA/month	5.50	
3 Industrial					
A Low Tension-I/LT-I					
0-500 units	Rs 30/HP/Month	3.10	Rs 35/HP/Month	3.30	
Above 500 units	Rs 30/HP/Month	3.50	Rs 35/HP/Month	3.80	
B Low Tension-Mixed/LT-P (Hotel Industries)					
All Units	Rs 30/kW/Month	4.50	Rs 40/kW/Month	4.70	
C High Tension-I/HT-I					
Connected at 11/33 kV	Rs 250/kVA/Month	4.30	Rs 250/kVA/Month	4.50	
Connected at 110 kV	Rs 250/kVA/Month	4.20	Rs 250/kVA/Month	4.40	
D High Tension- Ferro/SM/PI/ SR					
All Units	Rs 250/kVA/Month	4.30	Rs 250/kVA/Month	4.50	
4 Agricultural					
A Low Tension-AG/LT-AGP (Pump Sets/Irrigation)					
All Units	Rs 12/HP/Month	1.30	Rs 15/HP/Month	1.40	

1	2	3	4	5	6
B	Low Tension-AG/LT-AGA (Allied Activities)				
	All Units	Rs 20/HP/Month	1.60	Rs 20/HP/Month	1.70
C	High Tension-AG/HT-AGP (Pump Sets/Irrigation)				
	All Units	Rs 35/kVA/Month	1.40	Rs 35/kVA/Month	1.50
D	High Tension-AG/HT-AG (Allied Activities)				
	All Units	Rs 50/kVA/Month	1.80	Rs 60/kVA/Month	1.90
5	Military Engineering Services/Defense Establishments				
	All Units	Rs 175/kVA/Month	5.00	Rs 175/kVA/Month	5.00
6	Public Lighting				
	All Units	Rs 40/kW/Month	3.90	Rs 50/kW/Month	4.10
7	Hoardings/Signboards				
	All Units	Rs 60/kVA/Month	9.90	Rs 60/kVA/Month	9.90
8	Temporary Supply				
A	LT Temporary Domestic	Rs 60 per kW per month or part thereof subject to a minimum of Rs 300/- per connection per month or part thereof	7.00	Rs 60 per kW per month or part thereof subject to a minimum of Rs 300/- per connection per month or part thereof	7.20
B	LT Temporary Commercial	Rs 100 per kVA per month or part thereof subject to a minimum of Rs 500/- per connection per month or part thereof	9.90	Rs 120 per kVA per month or part thereof subject to a minimum of Rs 600/- per connection per month or part thereof	9.90
C	HT Temporary	Rs 120 per kVA per month or part thereof	9.90	Rs 120 per kVA per month or part thereof	9.90
9	Single Point Supply				
A	Residential Complexes	Rs 100 per kVA per month or part thereof	3.10	Rs 100 per kVA per month or part thereof	3.45
B	Commercial Complexes	Rs 200 per kVA per month or part thereof	4.30	Rs 200 per kVA per month or part thereof	4.60
C	Industrial Complexes	Rs 200 per kVA per month or part thereof	3.90	Rs 200 per kVA per month or part thereof	4.20

Further, the Petitioner has submitted a proposal for recovery of service charge from consumers availing power from MSEDCL. The Commission is of the view that schedule of miscellaneous charges have already been approved by the Commission for various services. The Petitioner is directed to submit a separate proposal along with citations of relevant regulations/judgements for determination of charges and information on the consumer number, connected load and energy sales for these type of consumers.

7.4.3. Revenue from Approved Retail Tariff for FY 2018-19

Based on the retail tariff approved above, the Revenue from approved tariff is shown in the table below. The revenue from LT-AG-Allied Activities, HT-AG-Allied Activities, HT Temporary and Single Point Supply has been not been computed due to non-availability of data on energy sales, connected load and number of consumers for these categories.

Table 58: Revenue from approved retail tariff (In Rs Cr)

S. No.	Category	Sales (MUs)	Demand Charges (Rs Cr)	Energy Charges (Rs Cr)	Total Charges (Rs Cr)	ABR (Rs/kWh)	K Factor
1	2	3	4	5	6	7	8
1	DOMESTIC	1000.73	19.92	252.21	272.13	2.72	0.61
(i)	LT-D Domestic	999.35	19.75	252.12	271.87	2.72	0.61
	0-100 units	276.28	7.60	38.68	46.28	1.68	0.37
	101-200 units	251.76	3.81	52.87	56.68	2.25	0.50
	201-300 units	164.13	4.22	43.50	47.71	2.91	0.65
	301-400 units	105.43	1.90	36.37	38.27	3.63	0.81
	Above 400 units	201.75	2.22	80.70	82.92	4.11	0.92
(ii)	Low Income Group	1.10	0.15	-	0.15	1.33	-
(iii)	HT-D Domestic	0.28	0.02	0.10	0.12	4.28	0.95
2	COMMERCIAL	404.47	28.39	193.44	221.83	5.48	
(i)	LT-C Commercial	325.42	15.62	149.97	165.58	5.09	1.13
	0-100 units	49.14	3.33	16.71	20.04	4.08	0.91
	101-200 units	31.05	0.81	12.73	13.54	4.36	0.97
	201-400 units	52.14	1.98	23.99	25.97	4.98	1.11
	Above 400 units	193.08	9.50	96.54	106.04	5.49	1.22
(ii)	HT-C Commercial	79.05	12.77	43.48	56.25	7.12	1.59
3	INDUSTRIAL	2123.52	140.71	942.75	1083.46	5.10	
(i)	LT-I Industrial	137.42	4.85	51.22	56.08	4.08	0.91
	0-500 units	19.96	2.28	6.59	8.87	4.44	0.99
	Above 500 units	117.46	2.58	44.63	47.21	4.02	0.90
(ii)	Low Tension-Mixed/LT-P (Hotel Industries)	5.31	0.21	2.50	2.70	5.09	1.13
(iii)	High Tension-I/HT-I	1398.09	106.39	626.81	733.21	5.24	1.17
	Connected at 11/33 kV	1165.47	96.54	524.46	621.01	5.33	1.19
	Connected at 110 kV	232.62	9.85	102.35	112.20	4.82	1.08
(iv)	High Tension-Ferro/SM/PI/SR	582.70	29.26	262.22	291.48	5.00	1.12
4	AGRICULTURE	29.94	0.97	4.25	5.22	1.75	-
(i)	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)	23.86	0.62	3.34	3.96	1.66	-
(ii)	Low Tension-AG/LT-AGA (Allied Activities)	-	-	-	-	-	-
(iii)	High Tension-AG/HT-AGP (Pump Sets/Irrigation)	6.08	0.35	0.91	1.26	2.08	-
(iv)	High Tension-AG/HT-AG (Allied Activities)	-	-	-	-	-	-

1	2	3	4	5	6	7	8
5	Military Engineering Services/Defense Establishments	26.89	1.49	13.45	14.93	5.55	1.24
6	PUBLIC LIGHTING	36.95	0.58	15.15	15.73	4.26	0.95
7	HOARDINGS/SIGNBOARDS	0.35	0.00	0.35	0.35	9.97	2.22
8	TEMPORARY	22.08	0.15	21.12	21.27	9.63	2.15
(i)	LT	22.08	0.15	21.12	21.27	9.63	2.15
	LT Domestic	2.74	0.01	1.97	1.98	7.23	1.61
	LT Commercial	19.34	0.14	19.14	19.28	9.97	2.22
	TOTAL	3644.93	192.21	1442.72	1634.92	4.49	

The Commission approves revenue from approved Retail Tariff of Rs 1634.92 Cr for the FY 2018-19.

The average increase in the retail tariff now approved by the Commission vis-à-vis the prevailing tariff is 6.37%. The table below provides the category wise Average Cost of Supply (ACoS), Existing Average Billing Rate (ABR), Approved ABR and the existing and approved recovery vis-à-vis the (ACoS).

Table 59: Tariff increase approved by Commission

Category	ACoS (Rs/kwh)	ABR at Existing Tariff (Rs/kwh)	ABR at Approved Tariff (Rs/kwh)	Increase (%)
Domestic	5.36	2.44	2.72	11.48%
Commercial	5.36	5.28	5.48	3.85%
Industrial	5.36	4.82	5.10	5.90%
Agriculture	5.36	1.60	1.75	8.82%
Military Engineering Services	5.36	5.55	5.55	0.00%
Public Lighting	5.36	4.02	4.26	5.74%
Hoardings/Signboards	5.36	9.97	9.97	0.00%
Temporary	5.36	9.60	9.63	0.37%
Total	5.36	4.22	4.49	6.37%

7.4.4. Revised Revenue Gap/Surplus

The Govt. of Goa through its letter No. 1/14/2017-Fin/(Bud)/dated 14th December, 2017 has conveyed its consent for providing the required budgetary support to meet the revenue gap for the year as may be approved by the Commission.

In view of above, the Commission approves the revenue gap as follows:

Table 60: Revised Revenue Gap/Surplus approved by Commission (In Rs Cr)

S. No.	Particulars	FY 2018-19
1	Net Revenue Requirement	1952.54
2	Revenue from Retail Sales at Existing Tariff	1536.97
3	Revenue from Retail Sales at Approved Tariff	1634.92
4	Revenue Gap/(Surplus) at Existing Tariff	415.27
5	Revenue Gap/(Surplus) at Approved Tariff	317.61
6	Gap/(Surplus) for the previous year	0.00
7	Total Gap/(Surplus)	317.61
8	Budgetary support from Govt. of Goa	317.61
9	Final Gap/(Surplus) for FY 2018-19	0.00

The Commission approves Final Revenue gap for the FY 2018-19 as nil.

7.4.5. Government Budgetary Support

The Commission has approved an overall revenue gap of Rs 415.27 Cr at existing tariff in FY 2018-19. This gap is recovered partly by increase in retail tariff and partly by budgetary support from Govt. of Goa. In case this gap had to be entirely fulfilled by revenue from consumers then it would have demanded an overall average increase of 27.04%. The Commission, in FY 2018-19, has approved an average tariff increase of 6.37%. In case the Govt. had not provided the budgetary support, then an average increase of 19.43% over and above the approved tariff increase would have been required which would have led to a tariff shock to consumers.

It is observed that the Govt. of Goa has been providing budgetary assistance to the Petitioner during the past few years. The Commission in this matter would like to point out the over reliance of the Petitioner on Govt.'s budgetary support. The Petitioner should prepare itself of the repercussions in case the Govt. withdraws the support in the future.

The table below provides the average tariff increase and ABR with and without Govt. budgetary support. The ABR without the Government Budgetary support has been calculated considering the same per unit Gap of Rs 0.87/kWh (Difference between ACoS and ABR at Approved Tariff with Govt. Budgetary Support) is loaded equally among all consumer categories.

Table 61: Cost of Supply and tariff increase with and without Govt. Budgetary support

Category	ACoS (Rs/kwh)	ABR at Approved Tariff with Govt. Budgetary Support (Rs/kwh)	Increase with Budgetary Support (%)	ABR without Govt. Budgetary Support (Rs/kwh)	Additional Increase without Budgetary Support (%)
Domestic	5.36	2.72	11.48%	3.59	32.04%
Commercial	5.36	5.48	3.85%	6.36	15.89%
Industrial	5.36	5.10	5.90%	5.97	17.08%
Agriculture	5.36	1.75	8.82%	2.62	49.93%
Military Engineering Services	5.36	5.55	0.00%	6.42	15.69%
Public Lighting	5.36	4.26	5.74%	5.13	20.48%
Hoardings/ Signboards	5.36	9.97	0.00%	10.84	8.74%
Temporary	5.36	9.63	0.37%	10.50	9.05%
Total	5.36	4.49	6.37%	5.36	19.43%

8. Chapter 8. Open Access Charges for the FY 2018-19

8.1. Wheeling Charges

8.1.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity

Petitioner's submission:

The Petitioner has bifurcated the ARR into Wheeling and Retail Supply Charges based on the methodology adopted by the Commission in the Tariff Order of FY 2017-18. The Petitioner has submitted the Wheeling Charges as shown in the table below:

Table 62: Wheeling Charge calculation as submitted by Petitioner

Particulars	Unit	Formula	FY 2018-19
Wheeling Cost	Rs Cr	A	477.21
Wheeling Cost at HT/EHT network	Rs Cr	$B = A * 54.36\%$	259.40
Input required for sales at 11 kV and above	MU	C	2172.07
Wheeling Charges for HT/EHT network usage	Rs/kWh	$D = B/C * 10$	1.19
Wheeling Cost for LT network	Rs Cr	$E = A * 45.64\%$	217.81
Input required for sales at LT level	MU	F	1757.50
Wheeling Charges for LT network usage	Rs/kWh	$G = E/F * 10$	1.24

Commission's analysis:

The Commission feels that there has to be a proper bifurcation of all expenses between the functions of the wheeling business (wire business) and the retail supply business. The Commission for the purpose of bifurcation of wheeling and retail ARR, is guided by the Staff Paper on "Operationalisation of Open Access in the State of Goa and UT's". The allocation between wheeling and retail supply business for the FY 2018-19 as per the ARR approved in this Order is provided in the table below:

Table 63: Allocation matrix approved by Commission

Particulars	Allocation (%)		FY 2018-19		
	Wheeling	Supply	Wheeling	Supply	Total
Cost of power purchase for full year	0%	100%	0.00	1329.68	1329.68
Employee costs	70%	30%	189.29	81.12	270.41
Administration and General Expenses	50%	50%	6.92	6.92	13.84
Repair and Maintenance Expenses	90%	10%	41.04	4.56	45.60
Depreciation	90%	10%	82.43	9.16	91.59
Interest and Finance charges	90%	10%	96.47	10.72	107.19
Interest on Working Capital	22%	78%	2.35	8.33	10.68
Interest on consumer security deposit	22%	78%	1.54	5.48	7.02
Return on NFA/Equity	90%	10%	74.94	8.33	83.27
Provision of Bad & Doubtful Debt	0%	100%	0.00	0.00	0.00
Income Tax	90%	10%	0.00	0.00	0.00
Total Revenue Requirement			494.99	1464.29	1959.28
Less: Non-Tariff Income	0%	100%	0.00	6.74	6.74
Net Revenue Requirement			494.99	1457.55	1952.54

To determine the wheeling charges, the wheeling costs are allocated on the basis of voltage levels. The wheeling charges are levied for the distribution network utilized by the Open Access consumers and primarily comprises of O&M Expenses and other costs as provided in the table above.

The methodology adopted for allocating the derived wheeling costs at respective voltage levels has been elaborated as follows:

- O&M Expenses consisting of Employee, A&G and R&M expenses are allocated to each voltage level on the basis of number of consumers
- All expenses other than the O&M expenses are allocated to each voltage level on the basis of voltage wise asset allocation. The Petitioner in this regard was directed to submit

the voltage wise asset allocation but has failed to submit the desired information and in the absence of such information, the Commission has assumed the voltage wise asset allocation.

- The resultant cost at HT/EHT voltage level derived after performing the above steps is then divided between LT and HT/EHT voltage level on the basis of input energy at respective voltage levels, since the HT/EHT network is used by consumers of both HT/EHT and LT voltage levels.

The energy input has been determined assuming the cumulative loss level of HT/EHT voltage as 3.64%, which is the same as approved in the Tariff Order of FY 2017-18. The Petitioner in this regard has failed to submit the voltage wise losses. The resultant losses have been loaded to the LT voltage level in order to maintain the overall Intra-State T&D loss at 10.75% as approved in the ARR of FY 2018-19.

Table 64: Parameters assumed for voltage wise allocation of wheeling costs

Category	Consumers	Asset Allocation (%)	Sales (MU)	Cumulative Voltage wise Losses (%)
Low Tension (LT) Level	619987	60.00%	1551.84	18.83%
High Tension (HT)/ Extra High Tension(EHT) Level	860	40.00%	2093.09	3.64%
Total	620847	100.00%	3644.93	10.75%

Accordingly, the Commission approves the Wheeling Charges as shown in the table below:

Table 65: Wheeling Charges approved by Commission

Category	O&M	Others	Total	Sales (MU)	Wheeling Charges (Rs/kWh)
Low Tension (LT) Level	237.07	202.90	439.98	1551.84	2.84
High Tension (HT)/ Extra High Tension(EHT) Level	0.17	54.83	55.01	2093.09	0.26
Total	237.25	257.74	494.99	3644.93	

The Commission approves wheeling charge of Rs 2.84/ kWh at LT voltage level and Rs. 0.26/kWh at HT/EHT voltage level

8.2. Additional Surcharge

Petitioner's submission:

The Petitioner has not proposed any additional surcharge in the Petition for approval.

Commission's analysis:

The Commission has notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. The Regulation 4.5 (1) of the said Regulations states the following:

“An Open Access Consumer, receiving supply of electricity from a person other than the Distribution Licensee of his area of supply, shall pay to the Distribution Licensee an additional surcharge in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act:

Provided that such additional surcharge shall not be levied in case Open Access is provided to a person who has established a captive generation plant for carrying the electricity to the destination of his own use.”

Regulation 4.5 (2) of the said Regulations stipulates:

This additional surcharge shall become applicable only if the obligation of the Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs by the Licensee consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.

Further, Regulation 5.2 (1) (b) states the following:

The quantum of drawal of electricity by a partial Open Access Consumer from the Distribution Licensee during any Time Block of a Day should not exceed the “Admissible Drawl of Electricity by the Open Access Consumer” which is the difference of Contract Demand and maximum quantum of Open Access for which approval has been granted by the Nodal Agency.

[Illustration: If an Open Access Consumer with a Contract Demand of 10 MW has been given an approval for a maximum Open Access quantum of 6MW for a period of 3 Months, the Admissible Drawl of Electricity from the Distribution Licensee during any Time Block shall be 4 MW for any Day during a period of 3 Months.]”

Therefore, in accordance with the above Regulations, the Commission has determined the Additional Surcharge as per the following:

Table 66: Additional Surcharge approved by Commission

Particulars	FY 2018-19
Total Power Purchase cost approved	1329.68
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges)	320.43
Energy Sales (MU)	3644.93
Additional Surcharge (Rs/kWh)	0.88

Earlier, a consumer availing Open Access was required to pay fixed charges on the contracted load even when the load was drawn partially from the Distribution Licensee. In addition, the consumer was also required to pay wheeling charges, additional surcharge and the cross-subsidy surcharge. As per the Open Access Regulations, 2017, a consumer now is only required to pay fixed charges on Admissible Drawal rather than on the total contracted load.

The Commission approves an Additional Surcharge of Rs 0.88/kwh for FY 2018-19.

The Commission directs the Petitioner to submit quarterly details of the power stranded on account of consumers opting for open access alongwith the Additional Surcharge recovered from these consumers. The Commission will analyse the information and change the applicable Additional Surcharge, if required.

8.3. Cross-Subsidy Surcharge

Petitioner's submission:

As per the National Electricity Policy, a surcharge is to be levied by the respective State Commission on consumers switching to alternate supplies under the open access. This is to compensate the host distribution licensee serving such consumers who are permitted Open Access under Section 42 (2) of the Electricity Act, for loss of cross-subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub-section (4) of Section 42 of the said Act for meeting the fixed cost of the distribution licensee arising out of its obligation to supply in cases where consumers are allowed open access.

Cross-subsidy surcharge (CSS) has been determined in accordance with the formula specified in the Tariff Policy, 2016.

The category-wise CSS applicable arrived on consideration of the components ABR, C, L & D as proposed by the Petitioner is as follows:

Table 67: Cross-Subsidy Surcharge as proposed by the Petitioner

Particulars	Unit	HT/EHT
T (Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation)	Rs/kWh	5.37
C (per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligations)	Rs/kWh	3.58
D (aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level)	Rs/kWh	1.19
L (aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level)	%	3.64%
Surcharge	Rs/kWh	0.59

Commission's analysis:

The Commission in this Order has calculated the cross-subsidy surcharge with respect to voltage wise cost of supply. The following approach has been adopted to determine the voltage wise cost of supply:

- Voltage Wise losses are assumed for HT/EHT voltage level. The remaining losses are adjusted in the LT voltage level in order to maintain the Intra-State T&D losses at 10.75%, as approved in the ARR for FY 2018-19. Voltage wise losses assumed at each level have been shown in the table below:

Table 68: Voltage wise losses assumed by Commission

Category	Voltage Level Loss (%)	Cumulative Losses upto that voltage level (%)
Low Tension (LT) Level	15.76%	18.83%
High Tension (HT)/Extra High Tension (EHT) Level	3.64%	3.64%
Total	10.75%	10.75%

Using these losses the energy input at each voltage level is determined based on the energy sales. The table below shows the energy input at each voltage level

Table 69: Energy Input at each voltage level (MU)

Category	Energy Sales (MU)	Cumulative Losses (%)	Energy Input (MU)
Low Tension (LT) Level	1551.84	18.83%	1911.80
High Tension (HT)/Extra High Tension(EHT) Level	2093.09	3.64%	2172.16
Total	3644.93	10.75%	4083.96

Now the overall ARR approved for FY 2018-19 is divided into variable and fixed ARR with variable ARR comprising of variable component of the power purchase cost and fixed ARR comprising of all the other costs.

The fixed component comprising of fixed cost of power purchase, O&M etc. is further allocated to each voltage category as per the following principles:

- The fixed cost of power purchase is assigned to each voltage level on the basis of energy input at respective voltage levels.
- The O&M expenses are allocated to each voltage level on the basis of the number of consumers. The resultant cost allocated to HT/EHT level is then further allocated between HT/EHT and LT level on the basis of input energy, as the HT/EHT network is utilized by both LT and HT/EHT network consumers.
- The remaining fixed costs are allocated on the basis of voltage wise asset allocation assumed earlier and further allocated to respective voltage levels on the basis of input energy.

Table 70: Parameters used for allocation of fixed costs

Category	Energy Input (MU)	Voltage wise Asset Allocation (%)	Number of Consumers
Low Tension (LT) Level	1911.80	60.00%	619987
High Tension (HT)/ Extra High Tension (EHT) Level	2172.16	40.00%	860
Total	4083.96	100.00%	620847

The Variable component of the Power purchase cost is allocated on the basis of energy input.

The Voltage wise cost of supply (VCoS) is then determined on the basis of energy sales of respective categories.

Accordingly, the VCoS is determined as shown in the table below:

Table 71: Voltage Wise Cost of Supply (VCoS)

Category	Allocated Fixed Cost (Rs Cr)	Allocated Variable Cost (Rs Cr)	Total Cost (Rs Cr)	Energy Sales (MU)	VCoS (Rs/kwh)
Low Tension (LT) Level	796.34	386.39	1182.73	1551.84	7.62
High Tension (HT)/ Extra High Tension(EHT) Level	330.79	439.02	769.81	2093.09	3.68
Total	1127.13	825.41	1952.54	3644.93	

This, VCoS is then used to determine the Cross-Subsidy Surcharge at each voltage level.

Table 72: Cross-Subsidy Surcharge approved by Commission (Rs/kWh)

Category	VCoS (Rs/kWh)	ABR (Rs/kWh)	Cross-Subsidy (Rs/kWh)
Low Tension (LT) Level	7.62	3.46	(4.16)
High Tension (HT)/Extra High Tension(EHT) Level	3.68	5.24	1.56

The Commission approves nil Cross-Subsidy Surcharge at LT Voltage level and Rs 1.56/kWh at HT/EHT Voltage level, in FY 2018-19.

9. Chapter 9: Tariff Schedule

9.1. Tariff Schedule

Table 73: Tariff Schedule

S. No.	Category	Approved Tariff	
		Fixed Charges	Energy Charges (Rs/kWh)
1	2	3	4
1	DOMESTIC		
A	Low Tension-D/LT-D		
	0-100 units	Single Phase Rs 25/Con/Month Three Phase Rs 60/Con/Month	1.40
	101-200 units		2.10
	201 to 300 units		2.65
	301 to 400 units		3.45
	Above 400 units		4.00
B	Low Tension-LIG/LT-LIG	Rs 40/Con/Month	
C	High Tension-D/HT-D		
	All Units	Rs 100/kVA/Month	3.45
2	COMMERCIAL		
A	Low Tension-C/LT-C		
	0-100 units	For consumers with Load upto – Rs 50/Con/Month	3.40
	101-200 units		4.10
	201 units- 400 units	For consumers with Load more than 20 kW and upto 90 kW- Rs 55/kW/Month	4.60
	Above 400 units		5.00
B	High Tension-C/HT-C		
	All Units	Rs 250/kVA/month	5.50
3	INDUSTRIAL		
A	Low Tension-I/LT-I		
	0-500 units	Rs 35/HP/Month	3.30
	Above 500 units	Rs 35/HP/Month	3.80
B	Low Tension-Mixed/LT-P (Hotel Industries)		
	All Units	Rs 40/kW/Month	4.70

1	2	3	4
C	High Tension-I/HT-I		
	Connected at 11/33 kV	Rs 250/kVA/Month	4.50
	Connected at 110 kV	Rs 250/kVA/Month	4.40
D	High Tension-Ferro/SM/PI/SR		
	All Units	Rs 250/kVA/Month	4.50
4	AGRICULTURAL		
A	Low Tension-AG/LT-AGP (Pump Sets/Irrigation)		
	All Units	Rs 15/HP/Month	1.40
B	Low Tension-AG/LT-AGA (Allied Activities)		
	All Units	Rs 20/HP/Month	1.70
C	High Tension-AG/HT-AGP (Pump Sets/Irrigation)		
	All Units	Rs 35/kVA/Month	1.50
D	High Tension-AG/HT-AG (Allied Activities)		
	All Units	Rs 60/kVA/Month	1.90
5	MILITARY ENGINEERING SERVICES/DEFENSE ESTABLISHMENTS		
	All Units	Rs 175/kVA/Month	5.00
6	PUBLIC LIGHTING		
	All Units	Rs 50/kW/Month	4.10
7	HOARDINGS/SIGNBOARDS		
	All Units	Rs 60/kVA/Month	9.90
8	TEMPORARY SUPPLY		
A	LT Temporary Domestic	Rs. 60 per kW per month or part thereof subject to a minimum of Rs 300/- per connection per month or part thereof	7.20
B	LT Temporary Commercial	Rs. 120 per kVA per month or part thereof subject to a minimum of Rs 600/- per connection per month or part thereof	9.90
C	HT Temporary	Rs. 120 per kVA per month or part thereof	9.90
9	SINGLE POINT SUPPLY		
A	Residential Complexes	Rs. 100 per kVA per month or part thereof	3.45
B	Commercial Complexes	Rs. 200 per kVA per month or part thereof	4.60
C	Industrial Complexes	Rs. 200 per kVA per month or part thereof	4.20

9.2. Applicability

Low Tension Category - Applicable to Power Supply of Voltages at 230V and 440V Voltages when the Sanctioned Load is below 100 KVA/90 KW/120 HP and power is supplied at single/ /three phase.

High Tension/Extra High Tension Category-Applicable to Power Supply of Voltages at 11KV/33KV/110KV and above i.e. High/Extra High Voltages when the Contracted Demand is above 100 KVA/ 90 KW/120 HP and power is supplied at three phase.

Table 74: Applicability of Tariff Schedule

Category	Applicability	Point of Supply/Notes
1. LT Domestic	<p>This schedule shall apply to private residential houses, government residential quarters, charitable institutions or educational institutions aided by State/ /Central Board, colleges aided by Goa University and religious institutions etc for consumption of energy using normal domestic appliances.</p> <p><i>The Professionals i.e. individuals engaged in those activities involving services based on professional skills, like Lawyers, Doctors {only those using OPD/consultancy}, Professional Engineers, Chartered Accountants, etc. may utilize the domestic connection at their residence for carrying out their professional work in the nature of consultancy without attracting commercial tariff for the electricity consumed, provided the area used for professional activity does not exceed the area permitted to be used for such activity in residential area as per the prevailing laws/notifications issued by Town and Country Planning Department/other concerned departments of Government of Goa in this regard.</i></p>	<p>a. For the premises or flats which are closed or locked for a continuous period of more than three months and having sanctioned /connected load more than 10 kW, the monthly minimum charges would be Rs1000/-.</p>
2. HT Domestic	<p>This schedule shall apply to individual residential consumers of Bungalows, Villas, Cottages, etc. using normal domestic appliances and whose contract demand falls within the threshold limit of HT category.</p>	
3. Low Income Group	<p>This schedule shall apply to consumers of Low Income Group who have a sanctioned load of up to 0.1 kW (primarily 2 points with 2 x 40 watts) and who consume up to 30 units per month only.</p>	<p>The applicability of the Low Income Group category will be assessed at the end of each month and in case the consumption exceeds 30 units per month, the entire consumption would be billed at the rate of LTD-/Domestic for that particular month.</p>

Category	Applicability	Point of Supply/Notes
4. Commercial – LT and HT	<p>This tariff is applicable to any activity not specifically covered in any other consumer categories, or although covered in another activity, the use is made for a commercial category. It would include electricity used in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> • Houses with rent back facilities • Government hospitals • Professionals not covered in domestic category. • Commercial Complexes and Business premises, including Shopping malls/show rooms, offices/shops; • Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Race Course, Meeting/Town Halls, Clubs, all types of Guest houses; • Offices including Government Offices, Commercial Establishments; • Marriage Halls (including halls attached to religious places), Hotels/Restaurants (without boarding facilities), Ice-cream parlours, Bakeries, Coffee Shops, private educational institutions, private hospitals, private messes, Internet/Cyber Cafes, Mobile Towers, Microwave Towers, Satellite Antennas used for telecommunication activity, Telephone Booths, Fax/Xerox Shops, X-ray installations, bars and cold drink houses, Tailoring Shops, Computer Training Schools, Typing Institutes, Photo Laboratories, Photo Studios, Laundries, Beauty Parlours and Saloons, dry cleaners etc • Automobile and any other type of repair centers, Retail Gas Filling stations, Petrol Pumps and Service Stations including Garages, Tyre Vulcanizing units, Battery Charging Units, Tyre vulcanizing centres etc; • Banks, Telephone Exchanges, TV Station, Micro Wave Stations, All India Radio (AIR) Stations, ATM Centres etc; • For common facilities, like Water Pumping/Street Lighting/Lifts/Fire Fighting Pumps/Premises (Security) Lighting, etc. in Commercial Complexes; • Sports Clubs, Health Clubs, Gymnasium, 	<p>Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture Allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged commercial tariff.</p>

Category	Applicability	Point of Supply/Notes
	<p>Swimming Pools;</p> <ul style="list-style-type: none"> Research and Development units situated outside Industrial premises; Airports, Railways, Railway Stations, Bus stands of KTC etc; 	
5. LT Industrial	<p>This tariff shall apply to industrial units engaged in industrial activities, manufacturing process etc. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> Flour Mills, wet grinding, Dal Mills, Rice Mills, Poha Mills, Masala Mills, Saw Mills, Power looms including other allied activities like Warping, Doubling, Twisting, etc. Ice Factories, Ice Cream Manufacturing units/Plants, Dairy Testing Process, Milk Dairies, Milk Processing/Chilling Plants (Dairy) etc; Engineering workshops, Engineering Goods Manufacturing units, Printing Presses, Transformer repairing Workshops, Tyre retreading units, Motive Power Loads etc; Mining, Quarry and Stone Crushing units etc; Garment Manufacturing units, LPG/CNG Bottling plants etc; Sewage Water Treatment Plants/ Common Effluent Treatment Plants owned, operated and managed by Industrial Associations and situated within industrial area. Pumping of water for public water supply, Sewage Treatment Plants, activities related with public water Supply Schemes and Sewage Pumping Stations. Use of electricity/power supply for activities/facilities exclusively meant for employees of the industry within the premises of the Industry. IT Industry, IT parks etc. 	<p>The above mentioned tariff is based on the supply being given through a single delivery and metering point and at a single voltage.</p>
6. LT Mixed – Hotel Industries	<p>This schedule shall apply to Hotels/ restaurants with lodging and boarding facilities.</p>	<p>Hotel Industry consumers intending to avail the facility of this tariff should produce a certificate from the Tourism Department stating that the intending applicant is registered under Goa Registration of Tourist Trade Act, 1982 and in the Hotel</p>

Category	Applicability	Point of Supply/Notes
		business on a regular basis. On receipt of the certificate, such tariff shall be made effective from the date of original validity of the certificate. In case of failure to produce the certificate, the same shall be considered under Commercial category.
7. HT Industrial	<p>This schedule shall apply to consumers taking electricity supply for Industrial purpose. It shall also include the following categories:</p> <ul style="list-style-type: none"> • Bulk Supply of power at 11 KV, 33 kV /110 KV and above for industries, factories and other industrial purposes. • Bulk supply of power at 11 KV and above for educational institutions owned or aided by Government, non-industrial establishments, • Industrial units engaged in Ice Manufacturing Units; • Hotels with lodging and boarding facilities etc • Use of electricity/power supply by an establishment such as IT Industries, IT Parks, IT Units • Pumping of water, public water supply, public water treatment plant, activities related with Supply Schemes and Sewage Treatment Plants, Sewage Pumping Stations etc 	
8. HT Ferro Metallurgical /Steel Rolling/Steel Melting/Power Intensive	<p>This schedule shall apply to supply of power having a Contract Demand from 100 KVA up to 1000 KVA at 11 KV and above 1000 KVA at 33 KV for Steel rolling industry and Metal Alloy, Steel Melting, Ferro Alloy, and Ferro metallurgical industries where melting is involved using electric power.</p>	
9. LT and HT Agriculture Pump sets	<p>This schedule shall apply to establishments for Irrigation pumping, De-watering and Lift Irrigation for cultivation of food crops such as cereals, pulses, vegetables and fruits etc and Cane crusher and/or fodder cutter for self-use for Agricultural purposes.</p>	<p>This tariff shall be applicable from the date of production of a certificate from the Directorate of Animal Husbandry or Agriculture Department of Government of Goa to the effect that the consumer carried on the said activity on regular basis. In</p>
10. LT and HT Agriculture Allied Activities	<p>This schedule shall apply to establishments for other allied activities related to Agriculture and shall include but not limited</p>	

Category	Applicability	Point of Supply/Notes
	<p>to:</p> <ul style="list-style-type: none"> • Poultry farms, Livestock farms, Combination of livestock farms with dairy, Piggery etc • Horticulture, Green Houses, Plantations, all types of nurseries etc. • Fish farms including ornamental fish farms, prawn farms, other aqua farms etc • Tissue culture, Mushroom activities, Aquaculture, Floriculture, Fisheries, Sericulture, Floricultural nurseries, hatcheries etc • Any other agricultural activity not falling under HT-Agriculture (A) shall be covered under this category 	<p>case of failure to produce the certificate, the same shall be considered under Commercial category.</p> <p>Cold Storages which are solely attached to Agriculture and its allied activities shall be charged tariff of Agriculture allied activities. All other cold storages which are partly or not attached with Agriculture and Allied activities shall be charged Commercial Tariff.</p>
11. MES/Defense Establishments	This schedule shall apply to supply of power for defense installation establishments, having mixed load with predominantly lighting or non-industrial load of more than 50% of connected load.	
12. LT Public Lighting	<p>This schedule shall apply to public lighting systems. It would include the following categories but not limited to:</p> <ul style="list-style-type: none"> • Market Places, Roads, Pathways and Parking Lighting belonging to local authorities such as Municipality/ Panchayats/Government; • Lighting in Public Gardens; • Traffic Signals and Traffic Islands; • State Transport Bus Shelters; • Public Sanitary Conveniences; and • Public Water Fountains and such other Public Places open for general public free of charge. • Street lighting in the colony of a factory which is situated separately from the main factory. • This shall also be applicable to public lighting of Government/Semi Government Establishments but shall not be applicable in case of private establishments 	
13. LT Hoardings/ Sign Boards	This schedule shall apply to lighting advertisements, hoardings and displays at departmental stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations etc. and shall be separately metered and charged at the tariff applicable for	

Category	Applicability	Point of Supply/Notes
	“Hoardings/Sign Board” category. However use of electricity for displays for the purpose of indicating/displaying the name and other details of the shop, on commercial premises itself, shall be covered under the prevailing tariff for such shops or commercial premises.	
14. LT Temporary Supply	<p>a) LT Temporary Domestic: This schedule shall apply to usage of electricity for all religious purposes or public functions for non-commercial purposes. It shall also apply for construction of own house by an individual with single tenement</p> <p>b) LT Temporary Commercial: This schedule shall apply to usage of electricity for any of the activities not covered under LT Temporary Domestic. It would include but not be limited to:</p> <ul style="list-style-type: none"> • All other Constructions including renovation, of all type of structures/ infrastructure, including buildings, bridges, flyovers, dams, power stations, roads, aerodromes, tunnels for laying of pipe lines for all purposes 	<p>i. The temporary connection shall be released through a proper meter</p> <p>ii. These temporary tariffs are applicable for temporary supply for a period not exceeding three months which may be extended beyond that period only with the prior permission of the Chief Electrical Engineer, up to a maximum period of six months for general purpose and two years for construction activities.</p> <p>iii. Security deposit shall be collected in advance for an assessed 3 months billing.</p>
15. HT Temporary Supply	This schedule shall apply to usage of electricity for all temporary purposes.	
16. HT SPS Single Point Supply	This schedule shall apply to a group of consumers who desire to take a HT connection at single point for consumption of energy within a Residential Complex – Group Housing Societies, Residential Housing Colonies, Cooperative Group Housing Societies, Township Areas; Commercial Complexes, including Malls; Industrial Complexes, including IT Parks, Bio-Parks or other entities classified as industries by the Government of Goa.	<p>In case of a dispute on whether the complex can be classified as an industrial complex, a certificate from Industries Department, Government of Goa will be required.</p> <p>The following shall be the different combinations for SPS in a defined area:</p> <ol style="list-style-type: none"> All LT consumer mix area All HT consumer mix area HT+LT consumer mix area <ol style="list-style-type: none"> The General Conditions, Miscellaneous and General Charges would also be applicable for all SPS categories. Based on technical and administrative feasibility, the ED-Goa may consider

Category	Applicability	Point of Supply/Notes
		<p>providing SPS power supply at HV/EHV level to a complex at a mutually agreed injection point.</p> <p>c. The SPS arrangement would be applicable for the application received from a Residential complex/Association of Persons (AOP)/Developer of the complex or any other such similar person.</p> <p>d. The SPS arrangement would be considered by ED-Goa only if the minimum sanctioned cumulative contracted demand of the complex (group of consumers) is 1.15 MVA/1 MW.</p> <p>e. The complete cost of erection and O&M for the sub-transmission and distribution infrastructure within such complex would need to be borne by the said SPS applicant.</p> <p>f. The SPS applicant would be required to develop and maintain an efficient, co-ordinated and quality sub-transmission and distribution system in its area of electricity supply. Further, the applicant would be responsible to comply with Standards of Performance and Supply Code Regulation as laid down under JERC Regulations and guidelines of Goa Electricity Department, if any. The network within the complex will need to be certified by the Chief Electrical Inspector.</p> <p>g. For Residential Complexes, SPS application shall be entertained for groups of LT consumers only. The loads of common amenities for such group may include pumps for</p>

Category	Applicability	Point of Supply/Notes
		<p>pumping water supply, lifts and lighting of common area. However, the consumption of energy for common services shall be separately metered with meters installed by the consumer and tested and sealed by licensee. The consumption of such energy over and above 10% of the total consumption of energy shall be billed at LT Commercial Tariff. The user shall inform the details of every non-domestic activity within the residential complex, such as commercial complex, industrial activity, and recreation club, along with the connected load to the licensee at the time of seeking the connection or at the time of enhancement in contract demand, and shall seek a separate connection for the same in case the common load is more than 10%.</p> <p>h. Individual Domestic HT consumers in a residential complex that opt for SPS shall need to apply separately under HT Domestic category.</p> <p>i. The SPS applicant shall not charge tariff to the downstream consumers higher than stipulated.</p> <p>j. The applicant shall be obliged to pay the total tariff (total billed amount) due to ED-Goa, as measured at HT end of SPS. However, to cover energy transformation losses and other O&M expenses, such applicant would be eligible to get rebates from ED-Goa on full bill payment, within</p>

Category	Applicability	Point of Supply/Notes
		<p>the due time:</p> <ul style="list-style-type: none"> i. 5% on the overall billed amount in all cases of LT and HT consumers ii. Any other loss would be to the account of the applicant. <p>k. For CC and IC applicant, any LT/HT Consumer in the area should have minimum 80% pre-dominant load of their appropriate category i.e. mix load is allowed only upto 20%. For e.g. If a HT/ /LT Industry Consumer has Factory, Residential Colony for its workers and also some Commercial facilities for his staff and the total of Residential and Commercial load is say around 30%, then separate Individual SPD connection may be taken for each such group as per activity.</p> <p>l. The implementation of SPS arrangement should be in accordance with the Electricity Act, 2003 and APTEL judgement dated 11th July 2011 in appeal No. 155 and 156 of 2010 in this regard.</p>

9.3. General Terms and Conditions

- 1) These tariffs are proposed to be made applicable from 1st April 2018 and shall remain valid till further Orders of the Commission.

Tariffs are subject to revision and/or surcharge that may be levied by ED-Goa from time to time as per the directives of the Commission.

- 2) The tariffs are exclusive of electricity duty and taxes levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
- 3) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- 4) Unless specifically stated to the contrary the figures of energy charges relate to rupee per unit (kWh) charge for energy consumed and fixed charge relates to a month.
- 5) If the energy supplied for a specific purpose under a particular tariff is used for a different purpose not contemplated in the contract for supply and/or for which a higher tariff is

applicable, it shall be deemed as unauthorized use of electricity and shall be assessed under the provisions of section 126 of the Electricity Act, 2003 and Supply Code Regulation 2010 notified by the JERC.

- 6) If connected load of a domestic category is found to be at variance with the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.
- 7) Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. These shall be double in case bi-monthly billing is carried out and shall be proportionately calculated as per the number of days of billing, Similarly slabs of energy consumption shall also be considered accordingly in case of bi-monthly or periodic billing.
- 8) The consumption for factory lighting/pump house lighting shall be billed as per respective main tariff category. A separate energy meter for recording energy consumed towards factory lighting for new installation need not be provided. For the existing installations, till the factory lighting meter's mains are shifted to main meter, the total energy consumption shall be arrived at by adding the energy consumption of the main energy meter and the factory lighting meter.
- 9) Supply of power in all cases shall be subject to the execution of Agreement between the Electricity Department, Goa and consumers and as per the JERC (Electricity Supply Code) Regulation 2010. The other conditions, definitions etc. shall be applicable as per the Electricity Act 2003 and various JERC Regulations, such as Standards of Performance, Supply Code, Conditions of Supply, Distribution Code etc., issued from time to time.

10) Billing of Demand in excess of Contracted Demand

The billing shall be on the maximum demand recorded during the month or 85% of contracted demand whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal energy rate.

The definition of the maximum demand would be in accordance with the provisions of the JERC (Electricity Supply Code) Regulations, 2010. If such over-drawal is more than 20% of the contracted demand then the connection shall be disconnected immediately.

Explanation:

Assuming the contract demand as 100 kVA, maximum demand at 120 kVA and total energy consumption as 12000 units, then the consumption corresponding to the contract demand will be 10,000 units ($12000 \times 100/120$) and consumption corresponding to the excess demand will be 2000 units. This excess demand of 20 kVA and excess consumption of 2000 units will be billed at twice the respective normal rate. e.g. in case of HTI/Industrial category, excess demand and consumption will be billed at the rate of Rs 500 per kVA per month and Rs 9.00/kWh respectively. Connections drawing more than 120 kVA shall be disconnected immediately.

- 11) The adjustment because of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula separately notified by the Commission under the

Regulation. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.

- 12) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in Section 7.4.3 of this Tariff Order.

13) Power Factor Charges for HT and EHT

- a) **'Power Factor'** means, the average monthly power factor and shall be the ratio expressed as a percentage of the total kilowatt hours to the total kilovolt ampere hours supplied during the month; the ratio being rounded off to two decimal figures.
 - b) The consumer shall maintain the monthly average power factor of the supply not less than 90% (lagging). If the monthly average power factor of (a) consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 1% in power factor upto 70%(lagging).
 - c) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95% (lagging).
 - d) If the average power factor falls below 70% (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- 14) For staff quarters, rest/guest houses, street lighting in the colony of a factory which is situated separately from the main factory and for distribution lines, service lines, etc. permitted to be owned and maintained by the HT consumer owning the factory, there shall be a separate connection and such energy consumed shall be charged under Single Point Supply.
- 15) **Advance Payment Rebate:** If payment is made in advance well before commencement of the consumption period for which the bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit, taxes and duties) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- If payment is made in advance along with prior declaration of premises to be closed for a certain period of time, a rebate of 1% per month shall be given on the amount (excluding security deposit, taxes and duties) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- 16) **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount (excluding taxes and duties) shall be given. Those consumers having arrears shall not be entitled for such rebate and the amount paid will first be used to set off past liabilities.
- 17) **Delayed Payment Charges (DPC):** In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of two percent (2%) (computed on a daily basis on the outstanding bill from the due date till the date of payment) shall be levied

on the bill amount. However, if a consumer makes part payment of a bill (in exceptional circumstances, with prior approval of the Chief Electrical Engineer), within the due date, then the delayed payment charges shall be applicable only on the amount which was not paid within the due date.

Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to the next rupee.

If the consumer fails to pay the energy bill presented to him by the due date the department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Electricity Act 2003 and Supply Code Regulations 2010 of JERC as amended from time to time.

In case of non-realization of payment through Cheque, a penalty of 5% of the cheque amount in addition to the Delayed Payment Charges (DPC) will be levied on the consumers.

18) Time of Day Tariff (ToD) :

- i. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off peak load period, shall be recorded by installing a ToD meter.
- ii. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Table 75: Applicability of ToD Tariff

Time of use	Demand Charges	Energy Charges
Normal period (7:00 a.m. to 6:00 p.m)	Normal Rate	Normal rate of energy charges
Evening peak load period (6:00 p.m to 11.00 p.m)	Normal Rate	120% of normal rate of energy charges
Off-peak load period (11:00 p.m to 7:00 a.m)	Normal Rate	90% of normal rate of energy charges

iii. Applicability and Terms and Conditions of TOD tariff:

- a) TOD tariff is mandatory for HT/EHT consumers and shall be optional for LT industrial and commercial consumers
- b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from sources other than ED-Goa through wheeling of power.
- c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.
- d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

9.4. Schedule of Miscellaneous Charges

Table 76: Schedule of Miscellaneous Charges

Description	Approved Charges
Monthly Meter Rental Charges (as per provisions of Regulation 7.3 (1) of JERC [Electricity Supply Code] Regulations 2010)	
Single Phase LT meter	Rs 10/month
Three Phase LT meter	Rs 20/month
Three Phase LT meter with CTs	Rs 50/month
LT Meter with MD Indicator	Rs 30/month
Tri-vector Meter	Rs 1000/month
Temporary Supply	Shall be twice as applicable in above meter types
Changing or moving a Meter board	Actual Cost + 15%
Note: a. For all domestic and other LT loads less than 50 kW loads in Urban and Rural areas-Static single phase/three phase meters b. For LT (contracted load \geq 50 KW)/HT/EHT consumer-Static, 3 Phase Tri-vector meters with MDI (MD Display)	
Reconnection Charges (as per provisions of Regulation 9.3 (c) of JERC [Electricity Supply Code] Regulations 2010)	
LT Services – At Cut outs	
• Single Phase	Rs. 25/-
• Three Phase	Rs. 50/-
LT Services – At Overhead Mains	
• Single Phase	Rs. 30/-
• Three Phase	Rs. 50/-
LT Services – At Underground Mains	
• Single Phase	Rs. 75/-
• Three Phase	Rs. 125/-
HT Services	Rs. 200/-
Note: If the same consumer seeks reconnection within 12 months from the date of reconnection or disconnection, 50% will be added to above charges	
Re-Rating of Installations	
Lighting Installation	Rs. 25/-
Motive Power Installation	Rs. 50/-
Testing Fee for Various Metering Equipments (as per provisions of Regulation 7.4 of JERC (Electricity Supply Code) Regulations 2010)	

Description	Approved Charges
Single phase LT	Rs. 25/energy meter
Poly Phase LT without CT	Rs. 50/energy meter
L.T. meter with CTs/Demand or Special Type Meters	Rs. 150/energy meter
H.T and E.H.T. metering equipment	Rs. 10000/- at site
Transformer Oil	Rs. 200/- per sample
3 – Ø Phase Tri-vector Meter Industrial LT Consumer	Rs. 1000/- for laboratory testing
3 – Ø Phase Tri-vector Meter 11 KV and 33kV HT Consumer	Rs. 5000/- at site
Three Phase Tri-Vector Meter 110 KV EHT Consumers	Rs. 1000/- at site
Combined CTPT Unit for 11kV and 33kV Consumer	Rs. 2500/-
110KV CT/PT Unit	Rs. 10000/-
Single Phase CT	Rs. 150/unit
Three Phase TT Block	Rs. 500/unit
Distribution Transformer Testing (HT con.)	Rs. 6000
Power Transformer Testing (EHT consumer)	Rs. 20000
Service Connection Charges (as per provisions of Regulation 3.3 (3) of JERC (Electricity Supply Code) Regulations 2010	
Single Phase 1 ϕ	Rs. 250
Three Phase 3 ϕ	Rs. 500 to Rs 1200
HT (First 500 KVA)	Rs. 10000
HT (Beyond 500 KVA)	Rs. 20000
Extra Length for 1 ϕ (beyond 30 meters)	Rs. 50/meter
Extra Length for 1 ϕ for agricultural consumers (beyond 300 meters)	Rs. 25/meter
Extra Length for 3 ϕ (beyond 30 meters)	Rs. 100/meter
Extra Length for 3 ϕ for agricultural consumers (beyond 300 meters)	Rs. 50/meter
Testing Consumer's installation (as per provisions of Regulation 4.10 (6) of JERC (Electricity Supply Code) Regulations 2010	
For first test of the new installation on or off an extension to an existing installation if the installation is found to be defective.	NIL
For Subsequent test of the new installation or of an existing installation if the installation is found to be defective	
• Single phase LT	Rs 100/-
• Three phase	Rs 200/-
• MS/BS loads upto 70kW	Rs 4000 + ST
• LS/BS/RT (loads Above 70kW)	Rs 8000 + ST

Description	Approved Charges
Changing the Meter or its position in the same premises at the request of the consumer when no additional material is required (as per provisions of Regulation 6.3 c) of JERC (Electricity Supply Code) Regulations 2010	
Single phase	Rs. 100/-
3-phase without C.Ts	Rs. 200/-
L.T. meter with C.T.s	Rs. 500/-
H.T and E.H.T. metering equipment	Rs. 8000 + ST
Re-sealing charges irrespective of the number of seals involved against each item below and where seals found to have been broken by the consumer	
Meter cupboard/Meter Cubical/Box	Rs. 50/-
Where cut-out is independently sealed	Rs. 50/-
Meter cover or Meter Terminal cover	Rs. 50/-
Meter cover of Meter Terminal cover (3 phase).	Rs. 50/-
Maximum demand Indicator or C.T.s chamber	Rs. 50/-
Service Charges	
General Supply	
• Single Phase	Rs. 10/-
• Three phase below 70kW	Rs. 20/-
• Three phase above 70kW	Rs. 50/-
Industrial/bulk/agriculture/Street Lightning Supply	
• Upto70kW	Rs. 25/-
• Above 70kW	Rs. 50/-
Replacement of broken glass	
Replacement of broken glass of meter cupboard (When there is default on Consumer Side)	Rs. 50/-
Replacement of broken Glass of single phase meter if the consumer has broken or tamper and with meter.	Rs. 50/-
Replacement of broken Glass of three phase meter if the consumer has broken or tamper and with meter	Rs. 50/-
Supply of duplicate copies of electricity bills	
Domestic Consumers	Rs. 5 per bill or Rs. 10 per statement
Non Domestic consumers	-
LT Industrial upto 20kW and AP Consumer	-
H.T Industrial and Bulk supply consumer	Rs. 5 per bill or Rs. 10 per statement

10. Chapter 10. Fuel and Power Purchase Adjustment Mechanism

The State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep Island, Chandigarh, Daman & Diu, Dadra & Nagar Haveli and Puducherry receive power from the Central Generating Stations, State Generating Stations, Independent Power Producer's (IPP's) through the long-term power purchase agreements and short-term purchases – through exchange, bilateral purchases etc. The distribution licensees procure power from various available sources and supply power to the consumers at retail tariffs determined by the Commission. Power purchase cost accounts for more than 80% of the Annual Revenue Requirements (ARR) of the distribution licensees and includes the cost paid for procurement of power, transmission charges, Deviation Settlement Mechanism (DSM) charges, State Load Despatch Center (SLDC)/Regional Load Despatch Center (RLDC) charges and is netted off with revenue earned from the sale of surplus power.

The cost of the long-term power being procured by the distribution licensees is fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State/UT (for example NTPC, NHPC etc.) and by the JERC for plants located within the region (for IPP's, licensees own generation and other State generating sources). Charges for the Over-drawal/Under-drawal from the Grid and the Inter-State Transmission charges, RLDC charges are fixed by the CERC, while Intra-State Transmission charges and SLDC charges are fixed by the JERC. Short term purchase/sale of power is done through traders, bilateral contracts, banking and power exchanges at market-determined prices.

While determining retail tariff for any year, the Commission first determines the ARR based on the projection of various cost elements including power purchase cost. Power purchase cost of the distribution licensee is derived from the power purchase quantum and per unit power purchase cost. Quantum of power purchase depends upon the energy sales to the retail consumer and distribution losses, out of which energy sales is not under the control of the distribution licensee. There is also variation in actual per unit power purchase cost vis-a-vis projected per unit power purchase cost due to change in fuel cost, change in power purchase mix i.e. thermal/hydel/renewable mix, long term/short term power mix etc. This makes power purchase cost uncontrollable in nature.

The Commission undertakes the truing up exercise for the variation in the cost and revenue once the audited accounts of the distribution licensee are available. For example, True-up of FY 2016-17 will be undertaken by the Commission once the audited accounts of FY 2016-17 are available. If the audited accounts for FY 2016-17 are prepared timely, the impact of true-up of various cost and revenue items is allowed in the tariff of FY 2018-19, along with the carrying cost for 2 years as the power purchase cost is the major cost element of the ARR of the distribution licensee, adjustment due to change in power purchase cost at regular intervals is important in order to avoid the burden of carrying cost on the additional power purchase cost incurred during the year.

10.1. Legal Provisions

The relevant provisions of the Electricity Act, Regulations, Policy document and the ATE judgments, which enable the Commission to devise, adopt and implement a power purchase/fuel price adjustment mechanism are as follows:-

(a) Indian Electricity Act, 2003- Section 62 (4)

"No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."

(b) Tariff Policy, 2016, clause 5.11 – sub-clause (h-4)

“Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events.”

(c) Tariff Policy, 2016, clause 8.2– sub-clause 8.2.1-(1)***“8.2 Framework for revenue requirements and costs***

Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC.”

(d) Hon'ble ATE judgement in OP1 of 2011 dated 11 November, 2011

The Hon'ble ATE directed the SERCs to develop a power purchase cost adjustment mechanism within six months of the date of the Order. The relevant excerpt of the Order is shown as follows:

“(vi) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this Order must put in place such formula/mechanism.”

10.2. Existing formula

The Commission first introduced the provision for adjustment of fuel surcharge in the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) Regulations, 2009 notified on 08 February 2010. The relevant Clause 7 of the Regulations is provided below:

“7. Fuel Surcharge Formula

(1) The fuel cost revisions for the generating companies/units owned by the licensee that are due to reasons beyond the control of the generating companies/the licensee be in accordance with the fuel surcharge formula as may be decided by the Commission from time to time.

(2) The generating company or the licensee may determine such charge in accordance with the specified formula and recover the same from such categories of consumers or the licensees, as the case may be after following procedure and the terms and conditions attached thereto.”

The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) (First Amendment) Regulations, 2009 on 27 June, 2012 prescribing the methodology for determination and the recovery mechanism of Fuel & Power Purchase Cost Adjustment (FPPCA) formula. Subsequently on 18 January, 2013, the Commission issued a Corrigendum correcting the calculations of the FPPCA for certain consumer categories.

On 30 June, 2014 the Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) Regulations, 2014 wherein the Commission proposed to adopt the same methodology as prescribed in the Joint Electricity Regulatory Commission for the State of Goa and UT's (Terms and conditions for determination of tariff) (First Amendment) Regulations, 2009 in the MYT Period. Clause 19 of the Regulations is shown as follows

“19. Treatment of Incremental Power procurement cost

The Distribution Licensee shall recover the incremental cost on account of fuel & power purchase adjustment in accordance with FPPCA formula provided in JERC Terms & Condition for determination of Tariff (first amendment) Regulations, 2009.”

On 19 October, 2016 JERC notified the Joint Electricity Regulatory Commission for the State of Goa and UT's (Multi-Year Distribution Tariff) (Second Amendment) Regulations, 2016 according to which the Fuel and Power Purchase cost adjustment charge shall be levied by distribution licensees on consumer electricity bills on account of the incremental power purchase cost incurred by the licensees and the Transmission charge recovery was also added to the formula. The relevant amendment to the Regulation has been shown as follows:

“1. Recovery Periodicity (Cycle)

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumers bills starting after a month following the end of the quarter on units billed in the month under consideration. For example, Fuel & Power Purchase Cost Adjustment (FPPCA) for the quarter April-May-June shall be made in the month of July and shall be reflected in the consumer bills raised in the months of August-September and October on the units billed for the respective months. The formula shall be applicable prospectively for the purpose of consideration of Fuel and Power Purchase Cost Adjustment. FPPCA shall be done for all consumer categories except Below Poverty Line (BPL) and Agriculture consumers

2. Formula

The formula for determination of per unit Fuel & Power Purchase Cost Adjustment (“FPPCA”) is as under:

Per Unit FPPCA (Paissa/unit) = Per Unit Actual cost of Power Purchase - Per Unit Approved Cost of Power Purchase in Tariff Order

$$\text{Per Unit FPPCA } \left(\frac{\text{Paissa}}{\text{Unit}} \right) = \left[\frac{P \text{ actual} - S \text{ bulk}}{[(X - c) - Xs] * b} - Z \right] * 1000 - R_{\text{approved}}$$

Where

$$c = \{(X - A) * \frac{T_{\text{approved}}}{100}\}$$

$$b = (1 - \frac{Y_{\text{approved}}}{100})$$

Where:

- *Pactual : Actual cost of power purchased during the quarter (excluding purchase from unapproved bilateral and other unapproved sources) includes transmission charges of PGCIL but excludes SLDC charges, RLDC charges and reactive energy charges (Rs crores).*

- *S bulk* : Actual Revenue recognized from Sale of power to persons other than consumers of the licensee during the quarter (Rs crores).
- *R approved* : Approved per unit cost of power purchase for use in the FPPCA formula as given in the Tariff Order of the Licensee (Paisa per unit).
- *X* : Actual Energy units (kWh) procured during the quarter in consideration excluding unapproved sources (million units).
- *A* : Actual Energy Units (kWh) procured during the quarter in consideration (million units) from power exchanges, power generation within the periphery of the licensee & used by licensee and units overdrawn from the grid.
- *T approved* : Approved inter-state transmission losses for the year in consideration as provided in the Tariff Order (%).
- *Y approved* : Approved T&D losses for the year in consideration as provided in the Tariff Order (%).
- *Xs* : Actual Sale of power to persons other than the utility consumers (million units) during the quarter.
- *Z* : Actual energy units billed for BPL and Agriculture category consumers (million units).

3. **Other Terms and conditions**

- a) For the purpose of Fuel and Power Purchase Cost Adjustment, all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain shall be considered. However, the bills or credits of earlier period received by the distribution licensee earlier than the period under consideration will not be considered for the purpose of FPPCA.
- b) The variation in fuel and power purchase cost adjustment with respect to the approved per unit power purchase cost, as per the formula specified above shall be recoverable/payable based on units billed for each category of consumers except BPL & Agriculture.
- c) Per unit rate of FPPCA to be billed to consumers is worked out in Paisa after rounding off to the next lower integer in case of fraction less than 0.5 and to the next higher integer in case of fraction equal to or greater than 0.5.
- d) The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:
 - Step 1: Determination of Value of K

$$\frac{\text{Approved Retail Tariff for a category or sub category}}{\text{Weighted Average Retail Tariff (WART)}}$$

The value of K for different consumer category or sub category for the year in consideration is considered as per the respective Tariff Order.

- *Step 2: Determination of proportionate FPPCA (Paisa/unit) consumer category/sub-category wise*

FPPCA to be billed for the consumers category or sub-category (Paisa/unit) =

$$\text{Average FPPCA} \left(\frac{\text{Paisa}}{\text{unit}} \right) * K \text{ for that consumer category or sub-category}$$

4. Duties of the licensees and Designated officer

- Every distribution licensee shall appoint a designated officer not below the rank of Executive Engineer with Name, Designation, Telephone No. & Fax and Place of Posting, who shall compute, certify and post the PPCA calculations, PPCA chargeable & related data summary on the licensees website and clarify to consumers query, if any.*
- The Designated Officer shall send certified copy of FPPCA calculations immediately to Joint Electricity Regulatory Commission."*

10.3. Need to review the existing mechanism

JERC has been amongst the first few Electricity Regulatory Commission's in India to introduce the concept of adjustment of variation in the power purchase cost in the end consumer tariffs through Fuel and Power Purchase Cost Adjustment (FPPCA) mechanism in 2012.

The Indian Power Sector is very dynamic and has changed a lot since 2012. Further, there have been changes in the methodology for determination and recovery of generation and transmission tariff, transmission pricing mechanism, fuel mix with emergence of renewable energy etc. Other State Electricity Regulatory Commissions (SERCs) have also introduced the concept of the FPPCA wherein the Fuel and Power Purchase cost variations are passed through to the consumer either monthly, bi-monthly or quarterly. In between, the Commission has also received representation from various consumer groups and the distribution licensees seeking clarity and simplicity in the FPPCA mechanism adopted by the Commission. In light of the above and the experiences gained during these years, the Commission has decided to examine the FPPCA mechanism followed in other States vis-à-vis the FPPCA mechanism adopted by the Commission and identify the best practices.

A detailed examination of the methodology followed across other States for calculation of variations in the Fuel and Power Purchase Cost Adjustment revealed the following observations:

- Every State has a different formula for determination of the FPPCA charges. However the fundamental objective of all of them remains the same i.e. to pass on the incremental cost of power procurement to the consumers.
- FPPCA charges are composed of different elements in different States with power purchase cost from approved and long term sources being the only element common across all States.
- FPPCA charges are mostly determined on the Discom Periphery across all the States.
- Power purchase cost considered as base for calculation of FPPCA charges is determined in the Tariff Order.
- For States, procuring power from own generation plants, the Station Heat Rate and other components such as Auxiliary consumption, losses etc. are considered as base as approved in the Tariff Order for calculating the variations in the power purchase costs.

The key takeaways with respect to certain parameters of the formula are provided in the table below:

Table 77: Key Takeaways

S. No.	Parameter	Takeaways
1.	<i>Time Period</i>	<ul style="list-style-type: none"> Time period for levy of the FPPCA is quarterly in most of the States except in Chhattisgarh and Bihar where recovery is on bi-monthly and monthly basis respectively.
2.	<i>Approval Process</i>	<ul style="list-style-type: none"> Some of the SERC's allow the Discoms to recover FPPCA charges upto a certain limit via automatic route (without approval of the Commission) thereby reducing the administrative burden. However, in most of the States like Maharashtra, Kerala, Madhya Pradesh etc. prior approval from the Commission is required.
3.	<i>Elements included while determining FPPCA charges</i>	<ul style="list-style-type: none"> In all the States, power purchase cost from long term approved sources is considered while calculating the FPPCA charges; Central Transmission charges are considered in the States of Gujarat, Maharashtra, Delhi and Uttar Pradesh; Adjustments (Under-recovery/Over-recovery) due to previous FPPCA period is considered in the States like Bihar, Karnataka, Kerala and Maharashtra; Power Purchase cost from short term sale/purchase, bilateral exchange, IEX etc. is considered in the States of Gujarat, Maharashtra and Uttar Pradesh; In States like Karnataka and Madhya Pradesh, only variable cost of power purchase is considered while calculating the FPPCA charges; In Uttar Pradesh (UP) any kind of arrears/refunds etc. in the period are also considered.
4.	<i>Elements excluded while determining FPPCA charges</i>	<ul style="list-style-type: none"> Short term power procurement cost is excluded while calculating FPPCA in most of the States except Gujarat, Maharashtra and Uttar Pradesh. In UP, power purchase cost from unapproved plants is excluded. DSM charges are excluded in most of the States. In Bihar, the Regulations categorically define exclusion of any kind of penalties due to delayed payment, while calculating FPPCA charges. In Chhattisgarh power purchase cost from renewable sources is excluded. In the NCT of Delhi, past arrear/credits are not considered unlike UP where they are considered.
5.	<i>Categories excluded</i>	<ul style="list-style-type: none"> Almost all categories are covered under the ambit of the FPPCA charges except in the State of Kerala where the domestic consumers upto a certain consumption limit are not levied FPPCA charges. In Gujarat State, the FPPCA charges for the Agriculture category are subsidized by the State Government.

S. No.	Parameter	Takeaways
6.	<i>T&D losses considered for determination</i>	<ul style="list-style-type: none"> In most of the States, the T&D losses approved in the Tariff Order are considered for calculation of gross units; however, in Gujarat and Bihar, the approved or actual losses whichever are lower are considered In Maharashtra, the actual T&D losses are considered.
7.	<i>Notification via Regulations/Tariff Order</i>	<ul style="list-style-type: none"> In most of the States like Delhi, Maharashtra, Madhya Pradesh etc., the FPPCA methodology is defined in the Tariff regulations except in Karnataka and Kerala where individual regulations are notified.
8.	<i>Ceiling within a month (%) for recovery</i>	<ul style="list-style-type: none"> In States like Maharashtra, Gujarat, Bihar and Karnataka, the upper ceiling of the FPPCA charges is provided which is applicable to all categories.
9.	<i>Ceiling within a month for a category</i>	<ul style="list-style-type: none"> Ceiling of the FPPCA charges in a quarter for categories such as Domestic and Agriculture in Chhattisgarh State.
10.	<i>Recovery Mechanism</i>	<ul style="list-style-type: none"> FPPCA charges are recovered from the consumers and are part of their electricity bills In some States like Gujarat and Madhya Pradesh, a uniform FPPCA charge is recovered depending on the billed units while in States like Maharashtra and UP, the category wise FPPCA charges based on the category ABR is determined

The existing FPPCA mechanism notified by the Commission is in the form of an amendment in the existing Regulation - *Joint Electricity Regulatory Commission for the State of Goa and UT's (Multi-Year Distribution Tariff) (Second Amendment) Regulations, 2016*. These Regulations are sub-legislations and making any changes in the Regulation involves legal process which is cumbersome and time consuming. The Commission, therefore, proposes to repeal the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (except Delhi) (Multi-Year Distribution Tariff) (Second Amendment) Regulations, 2016 and going forward provide formula for the FPPCA mechanism in the Tariff Order issued by the Commission.

In the section below, the Commission has discussed the proposed FPPCA formula for inclusion in the Tariff Order for the FY 2018-19.

10.4. New formula

Based on the review of the existing formula and examination of the formulas and the best practices adopted by the various SERC's, the Commission proposes the following mechanism for calculation and passing on of variations in the Fuel and Power Purchase Cost Adjustment (FPPCA) in the end consumer tariff, which shall come into force w.e.f. 1st April 2018 (i.e. Power Purchased by the Licensee from 1st April 2018 onwards). For power purchased by the Licensee for the period from 1st January 2018 till 31st March 2018, the FPPCA will be calculated based on the earlier formula.

1. Periodicity for recovery (Cycle)

The licensee shall compute the fuel and power procurement cost variations on a quarterly basis. The adjustment shall be made in the consumers bills starting after a month following the end of the quarter on the units billed in the months following the quarter.

For example, FPPCA for the quarter April-June shall be done in the month of July and shall be reflected in the consumer bills raised in the months of August, September and October on the units billed for the months of July, August and September respectively.

2. Chargeability

FPPCA charges shall be levied on all consumer categories excluding Below Poverty Line (BPL) and Agriculture category consumers on per unit basis on monthly/bi-monthly consumption depending on the billing cycle.

3. Formula

The FPPCA formula shall contain the following three components:

1. Power Purchase Cost adjustments which shall contain the following elements:
 - Variation in the Power Purchased from long term/firm sources viz. CGS, IPP's, State, Own generation etc. This may consist of fixed cost, variable costs, arrears, other charges but excluding any kind of penalties.
 - Variation in Short term power purchase cost through IEX, Bilateral etc. (shall be allowed upto a certain ceiling rate as may be fixed in the Tariff Order by the Commission).
 - Variation on account of Deviation Settlement Mechanism – Shall be allowed, but the incentive/penalty shall be excluded.
2. Transmission cost adjustments which shall contain the following elements:
 - Variation on account of Central Transmission Charges including arrears/revisions.
 - Variation on account of State Transmission charges including arrears/revisions.
3. Other Charges which shall contain all the other elements not forming part of the above two components for example:
 - Any adjustments/reversals due to over recovery of charges
 - Any adjustments due to under recovery of charges in case the Commission decides to limit the FPPCA charges in previous quarters to avoid tariff shock or other reasons
 - Any other adjustments on account of factors not envisaged at the time of tariff fixation
4. Less any revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost.

Based on the components as defined above, the new FPPCA formula can be represented as follows:

$$FPPCA \left(\frac{Rs.}{Unit} \right) = \left(\frac{(Pact + Tact + Oact - ASact) * 10}{\{ [PPOact * (1 - TLapp) + PPlact - PSOact] * (1 - DLapp) \}} - Zact \right) - Rapp$$

Where:

- *Pact(in Rs.Cr.):* Actual Power purchase cost inclusive of fixed cost, variable costs, arrears, and other charges excluding any kind of penalties incurred in the quarter. This shall include:
 - Cost of procurement from sources outside the State,
 - Cost of procurement from sources within the State,
 - Cost of DSM excluding any penal charges,

- Cost of procurement from the Bilateral/exchange etc.
- Less: Revenue from sale of surplus power/DSM
- *Tact (in Rs. Cr.):* Actual Transmission cost inclusive of any kind of arrears, other charges etc. and excluding any kind of penalties incurred in the quarter. This shall include:
 - Inter-State transmission cost (PGCIL charges),
 - Intra-State transmission cost
- *Oact (in Rs. Cr.):* Adjustments from the previous FPPCA quarter on account of over/under recovery and any other incidental costs not accounted for at the time of retail tariff fixation
- *ASact (in Rs. Cr.):* Revenue from Additional Surcharge collected from Open Access consumer towards the stranded power purchase cost
- *PPOact (in MU):* Quantum of power purchased in the quarter from sources outside State/ Union Territory
- *TLapp (in %):* Approved Inter-State transmission losses for the year in consideration as provided in the relevant Tariff Order
- *PPIact (in MU):* Quantum of power purchased in the quarter from sources within State/Union Territory, Bilateral/Exchange and Over-drawal under the DSM
- *PSOact (in MU):* Actual quantum of sale of surplus power/under-drawal under the DSM in the quarter
- *DLapp (in %):* Approved T&D losses for the year in consideration as provided in the relevant Tariff Order
- *Zact (in MU):* Actual energy sales for agriculture and BPL category consumers in the quarter

$$Rapp \left(\frac{Rs}{unit} \right) = \frac{(Papp + Tapp) * 10}{\{[PPOapp * (1 - TLapp) + PPIapp - PSOapp] * (1 - DLapp)\} - Zapp}$$

- *Papp (in Rs. Cr.):* Total power purchase cost approved in the Tariff Order for a quarter inclusive of fixed costs, variable costs etc. and containing the following elements:
 - Cost of procurement from sources outside the State,
 - Cost of procurement from sources within the State,
 - Cost of procurement from the Bilateral/exchange etc.
 - Less: Revenue from sale of surplus power
- *Tapp (in Rs. Cr.):* Total transmission charges approved in the Tariff Order for a quarter consisting of the following elements:
 - Inter-State transmission charges (PGCIL charges),
 - Intra-State transmission charges

- *PPOapp (in MU)*: Quantum of power to be procured from sources outside State/Union Territory in a quarter as approved in the Tariff Order.
- *TLapp (in %)*: Approved Inter- State transmission losses for the year in consideration as provided in the relevant Tariff Order.
- *PPIapp (in MU)*: Quantum of power to be procured from sources within the State, bilateral/exchange in a quarter as approved in the Tariff Order.
- *DLapp (in %)*: Approved T&D losses for the year in consideration as provided in the Tariff Order.
- *PSOapp (in MU)*: Quantum of sale of surplus power approved in the Tariff Order for a quarter.
- *Zapp (in MU)*: Sales for agriculture and BPL category consumers for a quarter as approved in the relevant Tariff Order.

4. Other Terms and conditions

1. For the purpose of the Fuel and Power Purchase Cost Adjustment, the Commission suggests that all the bills admitted and credits, if any, received by the distribution licensee during the period in consideration, irrespective of the period to which they pertain, may be considered.
2. The FPPCA charges determined as per the formula above may be recovered from the consumers of all categories based on their billed units excluding the BPL and the agriculture category consumers.
3. The FPPCA charges for a quarter shall be limited to **10%** of the ABR for a consumer category. The distribution licensee shall be allowed to collect the FPPCA without obtaining approval from the Commission. However, the distribution licensee shall be required to submit the FPPCA calculation to the Commission atleast one week before levying the same on the consumers.
4. The per unit FPPCA so worked out is charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:

- Step 1: Determination of Value of K

$$K = \frac{\text{Approved Retail Tariff for a category or sub-category} \left(\frac{\text{Rs.}}{\text{unit}} \right)}{\text{Weighted Average Retail Tariff (WART)} \left(\frac{\text{Rs.}}{\text{unit}} \right)}$$

The value of K for different consumer category or sub-category for the year in consideration is considered as approved in this Tariff Order.

- Step 2: Determination of proportionate FPPCA (Rs/unit) consumer category/sub-category wise

$$FPPCA \left(\frac{\text{Rs.}}{\text{Unit}} \right) = \text{Average FPPCA} * K \text{ for that consumer category or sub-category}$$

5. The Petitioner shall compute the fuel and power procurement cost variations, and adjustments shall be made in the consumer bills based on the FPPCA formula as approved by the Commission in this Order.

For the purpose of calculation, the approved per unit cost of power purchase (R_{approved}) shall be taken as Rs 3.76/kWh for the FY 2018-19.

Table 78: R_{approved} determined by Commission for FY 2018-19

Particulars	Amount
Total Power Purchase Cost (Rs Cr), P _{app}	1,145.84
Transmission Charges (Rs Cr), T _{app}	183.84
Power Purchase Quantum from CGS Stations at Generator Periphery (NTPC, NPCIL, NEEPCO) (MU), PPO _{app}	3,713.55
Approved Weighted Average Inter-State Transmission Loss (%), TL _{app}	4.41%
Power Purchase Quantum from sources within State/ Open Market (Co-Gen and Open Market) (MU), PPI _{app}	446.09
Quantum of Sale of Surplus Power (MU), PSO _{app}	-
Approved Intra-State T&D Loss (%), DL _{app}	10.75%
Energy Sales for LIG and Agriculture consumer category (MU), Z _{app} (MU)	31.04
R_{app} (Rs/kWh)	3.76

11. Chapter 11: Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now submit:

- *The detailed action plan for compliance of all the directives within 1 month of the issuance of this Order.*
- *The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections within 10 days of the end of each quarter of the calendar year.*

11.1. Directives continued in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission

shall be constrained to initiate necessary action under Section 142 of the Electricity Act, 2003 read with other provisions of the Act, and Regulations made there under.

11.1.1. Annual Statement of Accounts

Originally Issued in Tariff Order dated 27th June, 2012
<p>Commission's Latest Directive in Tariff Order dated 23rd May, 2017</p> <p><i>The Commission appreciates the effort undertaken by the Petitioner for the preparation of audited accounts on commercial principles. However, the Commission is of the view that while the Commission has undertaken the True-up for the FY 2011-12 and FY 2012-13 in this Order, in normal course and as per the provisions of Tariff Regulations, 2009, the True-up upto FY 2015-16 should have been done in this Order.</i></p> <p><i>The Commission has taken a serious note of this and directs the Petitioner to undertake necessary actions on priority so as to ensure that all the True-ups of FY 2013-14 to FY 2016-17 (along with audited accounts) are submitted with the Tariff Petition of FY 2018-19.</i></p> <p><i>The Commission shall be constrained to take appropriate action against the Petitioner in case of further non-compliance.</i></p>
<p>Petitioner's Response in the Present Tariff Petition</p> <p><i>The status of Audited reports for the previous years is as follows:</i></p> <ul style="list-style-type: none"> <i>Financial statements for FY 2013-14 are completed and audit has been undertaken. Awaiting for CAG Certificate.</i> <i>Financial statements for FY 2014-15 are completed and submitted to CAG for conducting Audit.</i> <i>Preparation of Financial Statements for FY 2015-16 and 2016-17, are under process.</i>
<p>Commission's Response</p> <p><i>The Commission has undertaken the True-up for the FY 2013-14 in this Order, even though in normal course and as per the provisions of Tariff Regulations, 2009 and MYT Regulations, 2014, the True-up upto FY 2016-17 should have been done in this Order.</i></p> <p><i>The Commission has taken a serious note of this and directs the Petitioner to undertake necessary action on priority so as to ensure that all the True-ups of FY 2014-15 to FY 2017-18 (along with audited accounts) are filed along with the next Tariff Petition submitted to the Commission.</i></p> <p><i>The Commission shall be constrained to take appropriate action against the Petitioner in case of further non-compliance.</i></p>

11.1.2. Preparation of Fixed Asset Register

Originally Issued in Tariff Order dated 27th June, 2012
<p>Commission's Latest Directive in Tariff Order dated 23rd May, 2017</p> <p><i>The Commission has noted with serious concern that the Petitioner is yet to submit the Fixed Asset and Depreciation Register. In previous year's submission also, the Petitioner had communicated the following:</i></p> <p><i>"GIS mapping of the assets will be completed as the part of RAPDRP Part A by 31st March, 2016".</i></p> <p><i>Further, the Petitioner has not given any reason for delay in completion of GIS Mapping. The</i></p>

Commission would like the Petitioner to take note of the fact that such submissions without any justifications are not appreciated by the Commission.

The Commission now direct the Petitioner to submit action plan along with timelines for preparation of Fixed Assets and Depreciation Register for previous years within 1 month of issuance of this Order. The Commission will be constrained to take appropriate action in case of further non-compliance by the Petitioner.

Petitioner's Response in the Present Tariff Petition

The status of FAR for the previous years is as follows:

- *FAR for FY 2013-14 and 2014-15 have been completed.*
- *FAR for FY 2015-16 and FY 2016-17, are under process.*

Commission's Response

The Commission has noted with serious concern that the Petitioner is yet to submit the Fixed Asset Register. The Petitioner is directed to submit the FAR upto FY 2017-18 along with the next tariff petition.

11.1.3. Energy Audit Reports

Originally Issued in Tariff Order dated 27th June, 2012

Commission's Latest Directive in Tariff Order dated 23rd May, 2017

The Commission has noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years.

The Commission now direct the Petitioner to submit action plan along with timelines for preparation of Energy Audit Report within 1 month of issuance of this Order. The Commission will be constrained to take appropriate action in case of further non-compliance by the Petitioner.

Petitioner's Response in the Present Tariff Petition

DT metering is not yet completed and still in progress. Only on completion of the same, the Energy Audit Report will be initiated.

Commission's Response

The Commission has noted with serious concern that the Petitioner is yet to submit the Energy Audit Reports for previous years.

The Commission directs the Petitioner to expedite the process of DT and Feeder metering and complete the Energy Audit of the State on priority.

11.1.4. Employee Cost/Manpower study

Originally Issued in Tariff Order dated 27th June, 2012

Commission's Latest Directive in Tariff Order dated 23rd May, 2017

The Commission has noted with serious concern that the Petitioner is yet to submit a systematic manpower study report with a specific focus on manpower rationalization.

The Commission now direct the Petitioner to submit action plan along with timelines for preparation of a systematic manpower study report with a specific focus on manpower

rationalization within 2 months of issuance of this Order. The Commission will be constrained to take appropriate action in case of further non-compliance by the Petitioner.

Petitioner's Response in the Present Tariff Petition

The report has been furnished by the consultant. However EDG is required to scrutinise further and subsequently will be submitted to State Government for decision. Post decision from State Government, the report will be submitted to the Hon'ble Commission.

Commission's Response

The Commission has noted with serious concern that the Petitioner is yet to submit a systematic manpower study report with a specific focus on manpower rationalization.

The Commission directs the Petitioner to finalise the report prepared by the appointed consultant and submit the same for the decision of the State Govt.

11.1.5. Interest on Consumer Security Deposit

Originally Issued in Tariff Order dated 31st March, 2013

Commission's Latest Directive in Tariff Order dated 23rd May, 2017

The Commission directs the Petitioner to pay the interest on consumer security deposit in the bills of as per the provisions of JERC Supply Code Regulations, 2009.

The Commission observes that while the Petitioner has undertaken some efforts towards compliance of this directive, still substantial payment is yet to be done by the Petitioner. The Commission is of the view that substantial time has already been given to the Petitioner. The Commission now directs the Petitioner to compute the quantum of backlog and ensure payment of balance security deposit pertaining to previous years before 31st August, 2017. No further extension will be entertained by the Commission in this matter and in case of further non-compliance, the Commission will be constrained to take appropriate action under Section 142 of the Electricity Act, 2003.

Petitioner's Response in the Present Tariff Petition

- *As on date an amount of Rs 14.79 Cr was allotted for payment of interest on consumer security deposit, out of which an amount of Rs 8.58 Cr has been credited to consumer account and the balance amount will be credited before the end of the financial year.*
- *Further, for FY 2018-19 an amount of Rs 6.47 Cr has been proposed for allotment.*

Commission's Response

The Commission observes that while the Petitioner has undertaken some efforts towards compliance of this directive, a substantial payment is yet to be credited to the consumers. The Commission is of the view that substantial time has already been given to the Petitioner. The Commission now directs the Petitioner to compute the quantum of backlog and ensure payment of balance interest on security deposit pertaining to previous years before 31st August, 2018.

11.1.6. Sub Divisions as Strategic Business Units

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission directs the Petitioner to submit the sub-division wise status report of readiness of all the sub-divisions towards introduction of the system of Cost-Revenue Centre Oriented Sub-Divisions within 2 months of issuance of this Order.</i>
Petitioner's Response in the Present Tariff Petition <i>As a pilot project, one of the sub-division under Division VI, Mapusa has been taken for that purpose.</i>
Commission's Response <i>The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to submit the report of this pilot project along with the sub-division wise status report of readiness of all the sub-divisions towards introduction of the system of Cost-Revenue Centre Oriented Sub-Divisions within 1 month of issuance of this Order.</i>

11.1.7. Installation of Pre Paid Meters

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission would like to highlight the Petitioner has long history of issues related to billing and collection. The pre-paid meters, though being costly as compared to conventional meters, will be cost effective in longer run. Further, GoI is already focusing on installation of smart meters.</i> <i>Thus, the Commission now directs the Petitioner to finalize and submit a proposal for installation of smart meters for following consumers:</i> <ol style="list-style-type: none"> <i>1. All HT and EHT Consumers.</i> <i>2. LT Industries and Hotel Industries.</i> <i>3. All Government Connections.</i> <i>4. All connections whose premises remain locked for 3 or more months in a year.</i> <i>The Petitioner is directed to submit this proposal within 4 months of issuance of this Order failing which the Commission will be constrained to take appropriate action against the Petitioner.</i>
Petitioner's Response in the Present Tariff Petition <i>As a pilot project under smart city mission, Government has considered installation of Smart Meters for Panaji and surrounding areas at a cost of Rs 70 Crores.</i> <i>Thereafter as directed, the Smart meters will be taken up for</i> <ol style="list-style-type: none"> <i>(1) All HT and EHT Consumers.</i> <i>(2) LT Industries and Hotel Industries.</i> <i>(3) All Government connections.</i> <i>(4) All Connections whose premise remain locked for 3 or more months in a year.</i>
Commission's Response <i>The Commission directs the Petitioner to expedite the process of installation of prepaid meters and submit a compliance report along with the filing of the next tariff petition.</i>

11.1.8. Unbundling of Electricity Department

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission has noted the submission of the Petitioner. The Commission directs the Petitioner to actively pursue the unbundling of the Department with the Government of Goa and submit quarterly progress reports in this regard.</i>
Petitioner's Response in the Present Tariff Petition <i>It is requested to the Hon'ble Commission that there is no specific directive for unbundling of EDG from the State Government and therefore the said directive may be dropped.</i>
Commission's Response <i>The Commission directs the Petitioner to submit the proposal to the State Govt. by June 30th 2018. Till such time a decision is taken by the State Govt. ring fencing of the transmission functions should be initiated. Further, it is directed that the Petitioner should increase its efforts towards making the State Load Dispatch Center (SLDC) fully operational.</i>

11.1.9. Renewable Energy Obligation

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission directs the Petitioner to submit the status of finalization of Solar Policy within 1 month of issuance of this Order.</i>
Petitioner's Response in the Present Tariff Petition <i>Solar Policy has been approved by Government of Goa and the same is being put in Public domain.</i>
Commission's Response <i>The Commission has noted the submission of the Petitioner. The Solar policy may be utilized for increasing the solar installations in the State. Efforts should be made to purchase physical power instead of REC's.</i>

11.1.10. Billing and Collection Efficiency

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission notes with serious concern the state of affairs of operation of the department. The Commission directs the Petitioner to take all necessary actions on priority so as to resolve all the issues pertaining to billing and collection and report the status along with next Tariff Filing.</i>
Petitioner's Response in the Present Tariff Petition <i>Presently billing and collection efficiency is above 80%.</i>
Commission's Response <i>The Commission notes with serious concern that the billing and collection efficiency in the State is very low. The Commission in the MYT Order had approved the collection efficiency of 100% for FY 2018-19 and AT&C loss level of 10.75%. The Commission directs the Petitioner to take all necessary actions on priority so as to resolve all the issues pertaining to billing and collection and report the status along with next Tariff Filing.</i>

11.2. New Directives issued in this Order**11.2.1. Creation of SLDC**

Currently, the functions of scheduling of power is being performed by the EDG itself. The Commission directs the Petitioner to fully operationalize a separate SLDC which is ring fenced from the EDG. The Petitioner is directed to deploy suitable employees dedicated for the SLDC functions.

11.2.2. kVAh based tariff

The Petitioner in the proceedings of this Tariff Order failed to submit the requisite data such as Power factor, kVAh readings etc. to implement kVAh based energy charges for HT/EHT consumers. The Petitioner is hereby directed to submit the status of technological readiness of these high voltage consumers and the requisite information of incentive/disincentive on account of power factor rebate/penalty, power factor for different categories and kVAh based readings of FY 2017-18 along with the filing of the next tariff petition.

11.3. Directives dropped in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that some of the directives issued in previous Tariff Orders are no longer required.

The Commission is of the view that since these directions have been complied with satisfactorily, these directions are no longer required in the present context and are required to be dropped or replaced with new directions. No further compliance/status is required to be submitted by the Petitioner for the following directives:

11.3.1. Management Information System (MIS) and Database Management System (DBMS)

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission now directs the Petitioner to submit action plan along with timelines for implementation of MIS and DBMS within 2 months of issuance of this Order.</i>
Petitioner's Response in the Present Tariff Petition <i>Management Information System (MIS) and Database Management System DBMS has been implemented under APDRP Part A Project.</i>
Commission's Response <i>The Commission observes that the objectives of implementation of MIS and DBMS have been achieved, therefore the Commission decides to drop this directive.</i>

11.3.2. Street Lights switching 'on' and 'off'

Originally Issued in Tariff Order dated 06th April, 2015
Commission's Latest Directive in Tariff Order dated 23rd May, 2017 <i>The Commission has noted the submission of the Petitioner and directs it to submit quarterly progress reports to the Commission.</i>
Petitioner's Response in the Present Tariff Petition <i>The Centralised Control and Monitoring system is in process of installation and is expected to be completed by end of FY 2017-18.</i>
Commission's Response <i>The Commission observes that the Petitioner is submitting quarterly progress reports and is in process of installation of CCMS. The Commission, therefore, in accordance with the Petitioner's submission decides to drop this directive.</i>

ANNEXURES

Annexure 1: Public Notices published by the Commission

04.07.2018

navhindtimes.com

(3)

Industrial Plot Required

Looking for approx 2000 to 5000 SqMt
Industrial plot with or without shade

Contact: info@team24.in
Call: 9764000000

Joint Electricity Regulatory Commission
(for the State of Goa and Union Territories)
2nd Floor, JERC Office Complex, Vashi (Navi Mumbai) Campus, Udyog
Nagar, Phase-II, Goregaon (East) (Mumbai) Pin: 401204, 2342852
Fax: 91224-2342852, E-mail: jerc@jerc.in, Website: www.jerc.in

PUBLIC NOTICE

Electricity Department of Goa has filed a Petition for approval of True-up of FY 2015-16, APM for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003. The same has been admitted as Petition No. 243/2017 and is available on the Commission's website www.jerc.in

Interested persons may file objections/suggestions in six copies on the above Petition in person or through E-mail: www.secretary@jerc.in or through registered post addressed to The Secretary, JERC (for Goa & UTs) to reach on or before 28.01.2018 with a copy to The Chief Electricity Engineer, Electricity Department, Govt. of Goa, Vidyan Bhawan, 3rd Floor, Panaji-1 Goa. (E-mail: ee-elect.goa@nic.in)

The Commission shall hold a Public Hearing on 28th January, 2018 at 11.00 AM, at Goa.

Sd/-
(Kamini Tewari)
Secretary

DEPARTMENT OF POSTS, INDIA
O/O SR SUPDT. OF POST OFFICE
GOA DIVISION, MAPUSA - 403507

ACCOMMODATION WANTED

Sealed tender are invited from landlords for hiring of accommodation for the following post office as per details below.

Sl. NO	Post Office	Accommodation required
1	Ribandar P.O.	278 Sq.ft. approximately. The accommodation should be centrally located at ground floor preferably or first floor with separate water & electricity connection/meter, separate attached toilets and urinals should also be provided exclusively for the use of Post Office Staff

* The Sealed tenders should be submitted by Registered Post or Speed Post only and should be addressed to Ms. Archana Gopinath, Sr. Supdt. of Post Offices, Goa Division, Mapusa 403507 and should clearly be superscribed as "Accommodation for Ribandar Post Office". For further details contact SSPDs Goa Division Mapusa 403507. Phone No. 2262450 / 2262663. Earnest Money: Not required. Last Date for submission of tender on 29.01.2018. Opening of tender 15.00 hrs on 30.01.2018.

Sd/-
SSPDs, Goa Division, Mapusa 403507

Public Notice

WHEREAS, the above named applicant has moved an application to the Court for Partition of the property...

AND WHEREAS, the applicant has made an application on 19.04.2017 and prayed for service of summons by leaving Public Notice in any final daily under order 7 Rule 20(1-a) of Civil Procedure Code, 1908 as the applicant has stated that inability to submit the detailed statements of the above applicants was their regret.

AND WHEREAS, I am satisfied that this is a fit case for grant of such permission.

NOW THEREFORE, notice is hereby given to all the above applicants and all interested parties to appear on 30.04.2018 at 10:00 AM in the Court for the said date and the taking where the matter will be heard and disposed of in due course.

Given under my hand and the seal of this Court on the 28th day of November 2017.

Sd/- (Clerk/Magistrate)
Deputy Collector & SOO-3, Bardez,
Majuro - Goa

जाहीर सूचना

पादरी जाहीर सूचना देण्या वेळे की, तोबा एण्ड व केवळीत प्रदेसाली (अंतर्गत) सोनल व किरान पंपपोर जोड व खुद प्रदेस) निमा, २०१७ म्य जेईआरपी देवळ्या प्रकल्पत अपोणाले दि. १७ जानेवारी २०१८ रोजी सकाळी ११.०० वा. जापोणपी कोर्ट म्य, २०१७ मकत, इरायनमयमालीतली आंमिळ कोपलेस, कांमिळ निमळ कोपलेस, अदोल निमळ, केम-V, गुलाव (होवण) केले वसुनारपी अपोणाल कोर्ताले आले. येकटीनवमळ प्रीक्रिमालीतली वकालतवा उवावाळ वसुन जापोणतला संकेतमळाला (www.jstnrtis.gov.in) दि. २८.१२.२०१७ रोजी अलोल कालता अलोल आले.

मही/- (कीर्ती तिवाही)
सचिव

संयुक्त चीज नियमन आयोग

जाहीर सूचना

गोव गेलाल विपुल विमाले आंमिळ म्य, २०१७-१८ म्य १-व्य, आंमिळ म्य २०१७-१७ म्य आंमिळ म्य २०१७-१८ म्य देवळाल आंमिळ म्य २०१८-१९ म्य वर निमळीत प्रकल्पत मानत मिळयामालीत मय वय बावत, २००३ म्य कालम ४९, ४९, ५१, ५२, ५४ म्य २४ अंतर्गत दखल दिलेल आले. यल म्य, जॉर्ज ड. २०१७/२०१७ गुलाव दखल कालत आल मल्ल म्य आंमिळाला www.jstnrtis.gov.in व संकेतमळाला आंमिळ आले.

इसुमळ मल्लाली वल्ल अलोलाल आंमिळ मल्लाली, सुनल मल्ल मल्ल प्रल्ल दखल कालत निमळ www.jstnrtis.gov.in व ई-केमळ कालतल निमळ मल्लाली, वेईमाली (गोव व केवळीत प्रदेसाली) कोमळाले दि. २९-०१-२०१८ रोजी कोर्ताले आल मल्लाली गेलालीतल दखल कालतल. मल्लाली एम डी गुलाव विपुल अंमिळाल, वय मल्लाली, गोव मल्लाली, विपुल मल्लाली, ३ व मल्लाली, मल्लाली, गोव (ई मल्लाली) www.jstnrtis.gov.in कोमळाले कालतली आंमिळालीतल वकालत दि. ३१ दखलाली २०१८ रोजी व, ११.०० वा. गोव मल्लालीतल मल्लाली.

मही/- (कीर्ती तिवाही)
सचिव

An ISO 9001:2008 Certified Institute

भाकअनुप - केन्द्रीय तटीय कृषि अनुसंधान संस्थान

भारतीय कृषि अनुसंधान परिषद

Ministry of Agriculture (Department of Agricultural Research and Education), GOVERNMENT OF INDIA

ICAR-CENTRAL COASTAL AGRICULTURAL RESEARCH INSTITUTE

Indian Council of Agricultural Research

Ela, Old Goa - 403 402 (INDIA)

No.4(168)/2016/Technical Manpower/Estt. Date: 29-12-2017

NOTIFICATION

Application are invited from eligible candidates for hiring technical persons at ICAR - Central Coastal Research Institute, Ela, Old Goa purely on contractual basis as per the details given below:-

Nomenclature	Number Of Technical manpower required	Essential qualification	Emoluments	Age Limit
Young Professional - I	Eight	Bachelors Degree in the Agriculture) or Allied Science including relevant basic science or Diploma holders in Engineering/ Technology.	Rs.15,000/- per month (Consolidated)	Minimum 21 Maximum 45 yrs. Relaxable as per rules

The crucial date for determining the age limit, educational qualification, experience etc. will be closing date for receipt of applications. The application in the prescribed format should reach Director, ICAR-CCARI, Ela, Old Goa 403 402 on or before **29-01-2018**. For further details like prescribed application form and conditions, please visit the website www.icar.org.in

Sd/- ADMINISTRATIVE OFFICER

crossing over, as a rationale for supporting the committee option with numbers on its side and is firm on insisting

event. Sure of the opposition numbers in the House, leader of opposition Ghulam Nabi Azad called for a vote on the

ment to pass the Women's Reservation Bill if it indeed believed it was the "champion" of women's rights.



HINDUSTAN PETROLEUM CORPORATION LIMITED
(A Government of India Enterprise)
Chief General Manager's Office
101, Ambassador, Kurla West
Mumbai - 400 082, Maharashtra

Tender No.: HPC/2018/MS-11888 dt. 22.12.2017

Tender Description: Construction of Statues Hotel at Mx. Trapsaw, Vioya Mandir, Ganeshgiri, Agartala, Tripura under CSR Initiative.

Due Date & Time for Bid submission: 20.01.2018 @ 10:00 Hrs. (MID) @ Rs. 7.90,300/-

Bidders meeting qualifying criteria can participate by logging in to the site <https://tender.hpcl.co.in>. The tender details including Bids Qualifying criteria, procedure for submission of bid, all revisions, clarifications, corrigenda, addenda, time extensions etc. will be hosted on HPCL website www.hindustanpetroleum.com. The Tenders and Contracts section only Bidders should regularly visit this website.



Joint Electricity Regulatory Commission
(For The State of Goa and Union Territories)
2nd Floor, HIRDC Office Complex, Vaniya Nikun Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana) Ph.: 0124-2342851, 2342852 Fax: 8124-2342853. E-mail: jerc@jerc.in, Website: www.jerc.in

PUBLIC NOTICE

Electricity Department of Goa has filed a Petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003. The same has been admitted as Petition No. 249/2017 and is available on the Commission's website www.jerc.in

Interested persons may file objections/suggestions in six copies on the above Petition in person or through E-mail www.secretary.jerc@gmail.com or through registered post addressed to The Secretary, JERC (for Goa & UTs) to reach on or before 29.01.2018 with a copy to The Chief Electricity Engineer, Electricity Department, Govt. of Goa, Vidyut Bhavan, 3rd Floor, Panaji- Goa. (E-mail: cee-@goa.gov.in)

The Commission shall hold a Public Hearing on 31st January, 2018 at 11.00 AM, at Goa.

Sd/-
(Keerti Tewari)
Secretary



VISVESVARAYA JALA NIGAM LIMITED

(Government of Karnataka Enterprise)

Office of the Executive Engineer, VJNL, Yettinahole Project Division,
No.2, Hanumanthapura Link Road, Vidyanagara Tumkur-572103
Ph & Fax: 0816-2283735 E-mail: eeypd2tmk@gmail.com

No.V.J.N.L/YP/E/D.2/TMK/TND-13,14&15/Corrigendum-1/2017-18/1414 Date: 02.01.2018

CORRIGENDUM NOTIFICATION-1 (Through E-procurement system)

This Office Tender Notification No:

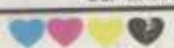
- 1) V.J.N.L/YP/E/E/ D.2/TMK/TND-13/170.287-182.500/Package-XI/2017-18/1338, Dated: 19.12.2017.
- 2) V.J.N.L/YP/E/E/ D.2/TMK/TND-14/182.500-198.000/Package-XII/2017-18/1339 Dated: 19.12.2017.
- 3) V.J.N.L/YP/E/E/ D.2/TMK/TND-15/210.090-222.000/YGC-Package-XIII/2017-18/1359, Dated: 20.12.2017.

The pre bid meeting date & submission dates have been modified as given in the table below.

Sl. No.	Calendar of Events	As per Tender Notification	As per corrigendum
1	The Contractor can have access to the e-tender document, i.e. the Tender bid Schedules, documents and other documents in the website https://eproc.karnataka.gov.in on payment of transaction fee (non-refundable) from	28.12.2017 to 08.01.2018 up to 17.00 Hrs	06.01.2018 to 17.01.2018 up to 17.00 Hrs
2	Pre bid meeting at Registered Office of VJNL, Bangalore	02.01.2018 at 11.00 Hrs	10.01.2018 at 11.00 Hrs
3	Last date & Time for tender Quaries/ Clarifications	05.01.2018 up to 17.00 Hrs	12.01.2018 up to 17.00 Hrs
4	The Last date of Submission of completed Tender Documents (Cover-1 & Cover-2) through e-portal.	08.01.2018 up to 17.00 hrs	17.01.2018 up to 17.00 Hrs
5	Date & Time of Opening of Technical Bid (Cover-I) by Superintending Engineer, V.J.N.L, Yettinahole Project Circle No.1, Tumkur.	10.01.2018 at 17.00 hrs	19.01.2018 at 17.00 hrs

Any queries regarding to "Pre bid meeting" may be submitted on or before 3:00 P.M. on 09.01.2018 to Executive Engineer. Note: The other Details mentioned under Tender Notification remains unchanged.

Sd/- Executive Engineer VJNL, YP Division No.2, Tumkur.



THE TIMES OF INDIA
04.01.2018

By No. 115-1, Financial Dept.
Hyderabad - 500 032, Tel.

ADVERTISEMENT FOR THE INSTITUTE OF INSURANCE AND RISK

Applications are invited for the post of by IRDAI and Government of Andhra Pradesh for a contractual tenure of three years whichever is earlier. The detailed notice is available on IRM website www.irdai.gov.in. The last 30th January, 2018.

IN THE HIGH COURT OF KAR

MFA No.: 1012

Substituted service of Notice
APPELLANT: THE NEW INDI
Through its Divisional Office, of Innova Car No. GA-08 11130031110100010379 Val 23.03.2013) R/By its Regional Hub, Srinath Complex, New

(By Sri G.N. I

RESPONDENT: MR. KIRAN S

Age: 30 Years, Occ: Service, RA

To, Respondent No.2 MSS KA

Age: 28 years, Occ: Student

Take Notice that the Appellant

above mentioned Miscellaneous

Court being approved by

passed on 25.01.2014 by Th

& Addl. Mact. Belagavi, in fi

Court required you to appear

person or through an advoc

on 18th Jan. 2018 at 10.30

would be heard and decide

Given under my hand and s

Day of Dec. 2017.

(M

GOVERN

DEPARTME

KARNATAKA I

Karnika Bhavana, 1st Floor, ITI C

Bangalore -29, Ph: 080-26531258

No. KLICR-26/2017-18

NOTIFIC

The Karnataka Labour Institute, for

Labour, invites applications for

Post of Director of the Institute with

Educational Qualifications: Post-

the Social Sciences, Law or a

recognized university.

Experience: Should have possess

as full time professor, she/he shou

published on the subject of Social

impressive publications record in the

referred Journals of international and

experience of serving for minimum

national level Institute.

Duration: The duration of this post

not be more than 67 Years.

Salary: UGC Pay Scale Rs. 37400

Last date for application: Appli

above address on or before 15.0

Sd/

DPR/DOU/146/17-18

158



Joint Electricity Regulatory Commission

(For the State of Goa and Union Territories)

2nd Floor, HSIIDC Office Complex, Vanija Nikunj Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana), Ph :0124-2342851, 2342852
 Fax: 0124-2342853, Email: secretaryjerc@gmail.com Website: www.jercutt.gov.in

PUBLIC NOTICE

Further to the Public Notice published on 04.01.2018, the stakeholders of the State of Goa are hereby informed that the Electricity Department of Goa has filed a Petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003. The same has been admitted as Petition No. 249/2017 and is available on the Commission's website www.jercutt.gov.in.

The Commission shall hold the Public Hearing on the above Petition as per the schedule given below:

Date/Day/Year	Time	Venue
31st January. (Wednesday), 2018	10.00AM onwards	Conference Hall, Ravindra Bhavan, Felorda, Margao, Goa- 403 602

It is informed that in the advertisement dated 04.01.2018, due to a typographical error the Email Id of the Commission was given as www.secretaryjerc@gmail.com. The correct E-mail Id is secretaryjerc@gmail.com. Further the E-mail Id of Chief Electrical Engineer, Goa may be read as ce-elec.goa@nic.in.

Sd/-
(Keebr Tewari)
Secretary



Joint Electricity Regulatory Commission

(for the State of Goa and Union Territories)

2nd Floor, JRCDC Office Complex, Vaniya Nikun Complex, Udyog Vihar, Phase-V, Gurgaon (Haryana), Ph: 0124-2342851, 2342852
Fax: 0124-2342853, Email: secretaryjerc@gmail.com Website: www.jercvtc-goa.in

PUBLIC NOTICE

Further to the Public Notice issued on 04.07.2016, the stakeholders of the State of Goa are hereby informed that the Electricity Department of Goa has filed a Petition for approval of True-up of FY 2013-14, APR for FY 2016-17 & FY 2017-18 and Tariff Determination proposal for FY 2018-19 under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003. The same has been admitted as Petition No. 249/2017 and is available on the Commission's website www.jercvtc-goa.in. The Commission shall hold the Public Hearing on the above Petition as per the schedule given below:

Date/Day/Year	Time	Venue
31st January (Wednesday), 2018	10.00AM onwards	Conference Hall, Ravindra Bhavan, Fatehda, Margao, Goa- 403 902

It is informed that in the advertisement dated 04.07.2016, due to a typographical error the Email id of the Commission was given as www.secretaryjerc@gmail.com. The correct E-mail id is secretaryjerc@gmail.com. Further the Email id of Chief Electrical Engineer, Goa may be read at cee-ecr.goa@nic.in.

Sd/-
 (Keerti Tewari)
 Secretary

159

[illegible]

Summary of Tru-up and Gap for FY 13-14 (Rs. Cro)									
No.	Particulars	Approved	Actual	Approved	Actual	Approved	Actual	Approved	Actual
1	Cost of power purchase	103.41	1,038.08						
2	Employee costs	144.27	178.27						
3	Fixed Expenses	18.53	21.10						
4	Subsidization and general expenses	9.58	10.54						
5	Depreciation	18.28	20.17						
6	Interest and Finance Charges	18.28	22.94						
7	Interest on Working Capital	5.44	13.94						
8	Interest on Security Overhead	9.42							
9	Transport for 67%	1.86	22.60						
10	Provision for Road Ducts		2.96						
11	Grant Expenses	0.26	0.33						
12	Total Revenue Requirement	1,154.69	1,408.88						
13	Less: New Tariff Income	22.88	17.27						
14	Less: Surplus from Sale of Power - 12 Fms	8.26	10.24						
15	Less: Provision for IPO Charges	28.42							
16	Appropriate Reserve Requirement (12-15-14 + 15)	1,153.17	1,379.58						
17	Revenue from Tariff	1,194.88	1,408.28						
18	Net Gap (16-17)	138.32	273.30						

Summary of ABR and Gap for FY 16-17, FY 17-18 and FY 18-19 (Rs. Cro)									
No.	Particulars	Approved	Actual	Approved	Actual	Approved	Actual	Approved	Actual
1	Cost of power purchase	1,245.20	1,310.06	1,350.30	1,218.31	1,417.92	1,272.77		
2	Provision for IPO Charges	8.68							
3	Employee costs	220.21	232.42	254.34	259.38	279.41	279.41		
4	Fixed Expenses	37.88	38.99	38.88	38.88	38.81	38.81		
5	Subsidization and general expenses	9.48	10.20	10.12	10.24	10.15	10.15		
6	Depreciation	49.22	78.88	64.18	72.86	97.59	97.59		
7	Interest on EOP & Finance Charges	87.83	81.90	74.04	68.44	107.18	107.18		
8	Interest on Working Capital	8.31	9.36	9.90	11.62	7.22	7.22		
9	Interest on Security Overhead	6.67	6.37	6.69	14.42	13.36	13.36		
10	Transport for 67%	44.15	38.39	38.33	60.62	82.27	82.27		
11	Provision for Road Ducts		8.36						
12	Provision for IPO Charges	3.88		0.41	0.41	0.01	0.01		
13	Total Revenue Requirement	1,998.98	1,895.38	1,852.88	1,768.36	2,064.37	2,064.37		
14	Less: New Tariff Income	6.74	22.82	9.14	20.14	9.74	9.74		
15	Appropriate Reserve Requirement (13-14)	1,994.14	1,919.78	1,843.32	1,748.02	2,054.63	2,054.63		
16	Revenue from Tariff	1,911.12	1,843.08	1,843.08	1,843.08	1,843.08	1,843.08		
17	Net Gap (15-16)	182.82	336.87	201.65	344.94	463.59	463.59		

IN RESPECT OF
PUBLIC NOTICE
OFFICE OF THE CHIEF ELECTRICAL ENGINEER
Vijaya Bhawan, Panaji Goa - 401 001

PERMISSION FOR APPROVAL OF TRUE-UP FOR FY 2015-16 ANNUAL PERFORMANCE REVIEW (APR) OF FY 2016-17 A
FY 2017-18 AND TRUE-UP FOR FY 2017-18 ANNUAL PERFORMANCE REVIEW (APR) OF FY 2018-19
DEPARTMENT OF GOA BEFORE THE JOINT ELECTRICITY REGULATOR COMMISSION FOR GOA AND JMW
TERRITORIES.

1. Notice is hereby issued to all consumers and stakeholders that the Electricity Department of Goa (EDGO), in compliance with
applicable laws and regulations, has decided to submit a true-up for FY 2015-16 and FY 2016-17 to the Joint Electricity
Regulator Commission for Goa and JMW Territories (JERC) for approval. The true-up for FY 2015-16 and FY 2016-17
will be submitted to the JERC by the EDGO by the 15th April 2018. The JERC will then submit the true-up to the
Department of Public Utilities (DPU) for approval. The DPU will then submit the true-up to the JERC for approval.
The JERC will then submit the true-up to the DPU for approval. The DPU will then submit the true-up to the JERC for approval.

2. The summary of the true-up for FY 2015-16 and FY 2016-17 is given in the table below:

No.	Category of Consumer	Head Charge (Rs. Cro)	Head Charge (Rs. Cro)	Head Charge (Rs. Cro)	Head Charge (Rs. Cro)
1	Domestic Supply	1.00	1.00	1.00	1.00
2	Small Commercial and Institutions	1.00	1.00	1.00	1.00
3	Large Commercial and Institutions	1.00	1.00	1.00	1.00
4	Industrial Supply	1.00	1.00	1.00	1.00
5	Public Supply	1.00	1.00	1.00	1.00
6	Other Supply	1.00	1.00	1.00	1.00
7	Unmetered Supply	1.00	1.00	1.00	1.00
8	Unmetered Supply	1.00	1.00	1.00	1.00
9	Unmetered Supply	1.00	1.00	1.00	1.00
10	Unmetered Supply	1.00	1.00	1.00	1.00
11	Unmetered Supply	1.00	1.00	1.00	1.00
12	Unmetered Supply	1.00	1.00	1.00	1.00
13	Unmetered Supply	1.00	1.00	1.00	1.00
14	Unmetered Supply	1.00	1.00	1.00	1.00
15	Unmetered Supply	1.00	1.00	1.00	1.00
16	Unmetered Supply	1.00	1.00	1.00	1.00
17	Unmetered Supply	1.00	1.00	1.00	1.00
18	Unmetered Supply	1.00	1.00	1.00	1.00
19	Unmetered Supply	1.00	1.00	1.00	1.00
20	Unmetered Supply	1.00	1.00	1.00	1.00
21	Unmetered Supply	1.00	1.00	1.00	1.00
22	Unmetered Supply	1.00	1.00	1.00	1.00
23	Unmetered Supply	1.00	1.00	1.00	1.00
24	Unmetered Supply	1.00	1.00	1.00	1.00
25	Unmetered Supply	1.00	1.00	1.00	1.00
26	Unmetered Supply	1.00	1.00	1.00	1.00
27	Unmetered Supply	1.00	1.00	1.00	1.00
28	Unmetered Supply	1.00	1.00	1.00	1.00
29	Unmetered Supply	1.00	1.00	1.00	1.00
30	Unmetered Supply	1.00	1.00	1.00	1.00
31	Unmetered Supply	1.00	1.00	1.00	1.00
32	Unmetered Supply	1.00	1.00	1.00	1.00
33	Unmetered Supply	1.00	1.00	1.00	1.00
34	Unmetered Supply	1.00	1.00	1.00	1.00
35	Unmetered Supply	1.00	1.00	1.00	1.00
36	Unmetered Supply	1.00	1.00	1.00	1.00
37	Unmetered Supply	1.00	1.00	1.00	1.00
38	Unmetered Supply	1.00	1.00	1.00	1.00
39	Unmetered Supply	1.00	1.00	1.00	1.00
40	Unmetered Supply	1.00	1.00	1.00	1.00
41	Unmetered Supply	1.00	1.00	1.00	1.00
42	Unmetered Supply	1.00	1.00	1.00	1.00
43	Unmetered Supply	1.00	1.00	1.00	1.00
44	Unmetered Supply	1.00	1.00	1.00	1.00
45	Unmetered Supply	1.00	1.00	1.00	1.00
46	Unmetered Supply	1.00	1.00	1.00	1.00
47	Unmetered Supply	1.00	1.00	1.00	1.00
48	Unmetered Supply	1.00	1.00	1.00	1.00
49	Unmetered Supply	1.00	1.00	1.00	1.00
50	Unmetered Supply	1.00	1.00	1.00	1.00
51	Unmetered Supply	1.00	1.00	1.00	1.00
52	Unmetered Supply	1.00	1.00	1.00	1.00
53	Unmetered Supply	1.00	1.00	1.00	1.00
54	Unmetered Supply	1.00	1.00	1.00	1.00
55	Unmetered Supply	1.00	1.00	1.00	1.00
56	Unmetered Supply	1.00	1.00	1.00	1.00
57	Unmetered Supply	1.00	1.00	1.00	1.00
58	Unmetered Supply	1.00	1.00	1.00	1.00
59	Unmetered Supply	1.00	1.00	1.00	1.00
60	Unmetered Supply	1.00	1.00	1.00	1.00
61	Unmetered Supply	1.00	1.00	1.00	1.00
62	Unmetered Supply	1.00	1.00	1.00	1.00
63	Unmetered Supply	1.00	1.00	1.00	1.00
64	Unmetered Supply	1.00	1.00	1.00	1.00
65	Unmetered Supply	1.00	1.00	1.00	1.00
66	Unmetered Supply	1.00	1.00	1.00	1.00
67	Unmetered Supply	1.00	1.00	1.00	1.00
68	Unmetered Supply	1.00	1.00	1.00	1.00
69	Unmetered Supply	1.00	1.00	1.00	1.00
70	Unmetered Supply	1.00	1.00	1.00	1.00
71	Unmetered Supply	1.00	1.00	1.00	1.00
72	Unmetered Supply	1.00	1.00	1.00	1.00
73	Unmetered Supply	1.00	1.00	1.00	1.00
74	Unmetered Supply	1.00	1.00	1.00	1.00
75	Unmetered Supply	1.00	1.00	1.00	1.00
76	Unmetered Supply	1.00	1.00	1.00	1.00
77	Unmetered Supply	1.00	1.00	1.00	1.00
78	Unmetered Supply	1.00	1.00	1.00	1.00
79	Unmetered Supply	1.00	1.00	1.00	1.00
80	Unmetered Supply	1.00	1.00	1.00	1.00
81	Unmetered Supply	1.00	1.00	1.00	1.00
82	Unmetered Supply	1.00	1.00	1.00	1.00
83	Unmetered Supply	1.00	1.00	1.00	1.00
84	Unmetered Supply	1.00	1.00	1.00	1.00
85	Unmetered Supply	1.00	1.00	1.00	1.00
86	Unmetered Supply	1.00	1.00	1.00	1.00
87	Unmetered Supply	1.00	1.00	1.00	1.00
88	Unmetered Supply	1.00	1.00	1.00	1.00
89	Unmetered Supply	1.00	1.00	1.00	1.00
90	Unmetered Supply	1.00	1.00	1.00	1.00
91	Unmetered Supply	1.00	1.00	1.00	1.00
92	Unmetered Supply	1.00	1.00	1.00	1.00
93	Unmetered Supply	1.00	1.00	1.00	1.00
94	Unmetered Supply	1.00	1.00	1.00	1.00
95	Unmetered Supply	1.00	1.00	1.00	1.00
96	Unmetered Supply	1.00	1.00	1.00	1.00
97	Unmetered Supply	1.00	1.00	1.00	1.00
98	Unmetered Supply	1.00	1.00	1.00	1.00
99	Unmetered Supply	1.00	1.00	1.00	1.00
100	Unmetered Supply	1.00	1.00	1.00	1.00

ELECTRICITY DEPARTMENT, GOVERNMENT OF GOA
OFFICE OF THE CHIEF ELECTRICAL ENGINEER
Vijaya Bhawan, Parel Goa - 403 001

PUBLIC NOTICE
IN RESPECT OF

PERMISSION FOR APPROVAL OF TARIFF FOR FY 2015-16, ANNUAL PERFORMANCE REVIEW (APR) OF FY 2016-17 & FY 2017-18 AND TARIFF DETERMINATION FOR FY 2018-19 FILED BY CHIEF ELECTRICAL ENGINEER, GOVERNMENT OF GOA BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UNION TERRITORIES.

- Notice is hereby given to all interested parties and stakeholders that the Electricity Department of Goa (EDG), a deemed Government Company, has submitted its annual performance review (APR) for FY 2016-17 and FY 2017-18 and tariff determination for FY 2018-19 to the Joint Electricity Regulatory Commission for Goa and Union Territories (JERC) for their consideration and approval.
- The APR for FY 2016-17 and FY 2017-18 is available for public inspection at the office of the Chief Electrical Engineer, Electricity Department, Government of Goa, Vijaya Bhawan, Parel Goa - 403 001, from 10.00 AM to 05.00 PM on all working days from 10.04.2018 to 10.10.2018.
- The APR for FY 2016-17 and FY 2017-18 is also available for public inspection at the office of the Joint Electricity Regulatory Commission, Multi-Use Distribution Centre, Sector 10, Gandhinagar, New Delhi - 110 002, from 10.00 AM to 05.00 PM on all working days from 10.04.2018 to 10.10.2018.
- The APR for FY 2016-17 and FY 2017-18 is also available for public inspection at the office of the Joint Electricity Regulatory Commission, Multi-Use Distribution Centre, Sector 10, Gandhinagar, New Delhi - 110 002, from 10.00 AM to 05.00 PM on all working days from 10.04.2018 to 10.10.2018.

Summary of Tariff for FY 2015-16 and FY 2016-17 (Rs. crs)

Sr. No.	Particulars	Approved	Actual
1	Cost of power purchase	813.41	1,071.46
2	Employee costs	144.21	170.87
3	FDI expenses	18.81	27.45
4	Administration and general expenses	9.08	18.84
5	Depreciation	18.08	26.57
6	Interest on loans and advances	16.79	23.84
7	Interest on Working Capital	3.84	13.84
8	Interest on Security Deposit	5.42	-
9	Interest on M&A	5.96	107.86
10	Provision for Bad Debt	-	2.86
11	Other Expenses	0.36	0.33
12	Total Revenue Requirement	1,154.88	1,488.98
13	Less: Govt. Subsidy	22.55	17.82
14	Less: Revenue from Sale of Power, LT Feed	6.38	18.34
15	Net Revenue Requirement	1,126.95	1,498.82
16	Less: Provision for RPS Discharge	26.43	-
17	Revenue from Tariff	1,100.52	1,498.82
18	Net Gap (18-17)	26.43	-

3. The summary of Annual Performance Review (APR) of FY 2016-17 & FY 2017-18 and Tariff Determination for FY 2018-19 is given in the table below

Summary of APR and Tariff for FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 (Rs. crs)

Sr. No.	Particulars	Approved	Actual	Approved	Estimated	Approved
1	Cost of power purchase	813.41	1,071.46	1,337.39	1,216.31	1,417.82
2	Employee costs	144.21	170.87	15.38	-	15.17
3	FDI expenses	18.81	27.45	276.27	276.27	276.41
4	Administration and general expenses	9.08	18.84	26.57	30.30	10.81
5	Depreciation	18.08	26.57	15.12	17.84	40.51
6	Interest on loans and advances	16.79	23.84	14.15	17.40	81.58
7	Interest on Working Capital	3.84	13.84	74.04	48.44	107.18
8	Interest on Security Deposit	5.42	-	9.85	11.62	7.02
9	Interest on M&A	5.96	107.86	14.52	12.30	-
10	Provision for Bad Debt	-	2.86	58.23	60.22	62.27
11	Other Expenses	0.36	0.33	-	-	-
12	Total Revenue Requirement	1,154.88	1,488.98	1,602.98	1,704.28	1,884.37
13	Less: Govt. Subsidy	22.55	17.82	6.14	6.14	6.14
14	Less: Revenue from Sale of Power, LT Feed	6.38	18.34	1,590.59	1,692.00	1,872.09
15	Net Revenue Requirement	1,126.95	1,498.82	1,036.25	1,098.18	1,006.14
16	Less: Provision for RPS Discharge	26.43	-	26.43	26.43	26.43
17	Revenue from Tariff	1,100.52	1,498.82	1,009.82	1,071.75	979.71
18	Net Gap (18-17)	26.43	-	26.43	26.43	26.43

- The APR for FY 2016-17 and FY 2017-18 is submitted at the time of year-up and as per treatment given for FY 2016-17.
- The APR for FY 2016-17 and FY 2017-18 is submitted at the time of year-up and as per treatment given for FY 2016-17.
- The APR for FY 2016-17 and FY 2017-18 is submitted at the time of year-up and as per treatment given for FY 2016-17.
- The APR for FY 2016-17 and FY 2017-18 is submitted at the time of year-up and as per treatment given for FY 2016-17.

Annexure 3: List of Stakeholders

The following is the list of the stakeholders who have submitted objections/suggestions:

Table 79: List of Stakeholders

S. No.	List of Stakeholder	S. No.	List of Stakeholder
1.	Sh. Owen Braganza	30.	Vasu R. Patel
2.	Ms. Nancy Fernandes	31.	Rajesh Shet
3.	Sh. Martin Rodrigues	32.	Abhay Keny
4.	Sh. Porfiro Fernandes	33.	S.V. Purohit
5.	Ms. Mamta Srivastava	34.	P.K. Umadathan
6.	Sh. Prashant K. Anvekar	35.	Anthony Fernandes
7.	Dr. Kurade	36.	Lira Matu
8.	Sh. Agnelo D'Silva	37.	Aditya Bidre
9.	Ramona Almeida	38.	Lorna Fernandes
10.	Lorna Fernandes	39.	Neet De Soya
11.	Jose M. Miranda	40.	Camil Pinto
12.	Sh. Mayur Chaudhari	41.	Josephine Pinto
13.	Olga Netto	42.	Prakash Lotlikar
14.	Nicladina F. D'Mello	43.	Raghee Billava
15.	George Gravier	44.	Maria Magdalena Almeida
16.	Vivian Alheida	45.	Ashley Vales
17.	Roland Martins	46.	Nilesh Panehwadkor
18.	Gerand D'Mello	47.	Rolance Coutinho
19.	John Diniz	48.	Ratika Naik
20.	Porfiro Fernandes	49.	Uttam Gaonkar
21.	Cipriana Fernandes	50.	Rupesh
22.	Ashish Gaundalhan	51.	Confederation of Indian Industries, Goa
23.	Silvestre Niassso	52.	Alloys and Steels
24.	B.L. Biyani	53.	Zuary Foods and Tropical Mushroom
25.	Dishant Parab	54.	Verna Industries Association
26.	Atish Tulaskan	55.	Gram Sabha
27.	Pratik Parab	56.	Aldona Civic and Consumer Forum
28.	Xavier Fernandes	57.	Charao Civic and Consumer Forum
29.	Hector Colaco	58.	Raia Civic and Consumer Forum

www.goaprintingpress.gov.in

Published and Printed by the Director, Printing & Stationery,
Government Printing Press,
Mahatma Gandhi Road, Panaji-Goa 403 001.

Price—Rs. 117.00

PRINTED AT GOVERNMENT PRINTING PRESS, PANAJI-GOA—24/200—4/2018.